



FIGURE 1

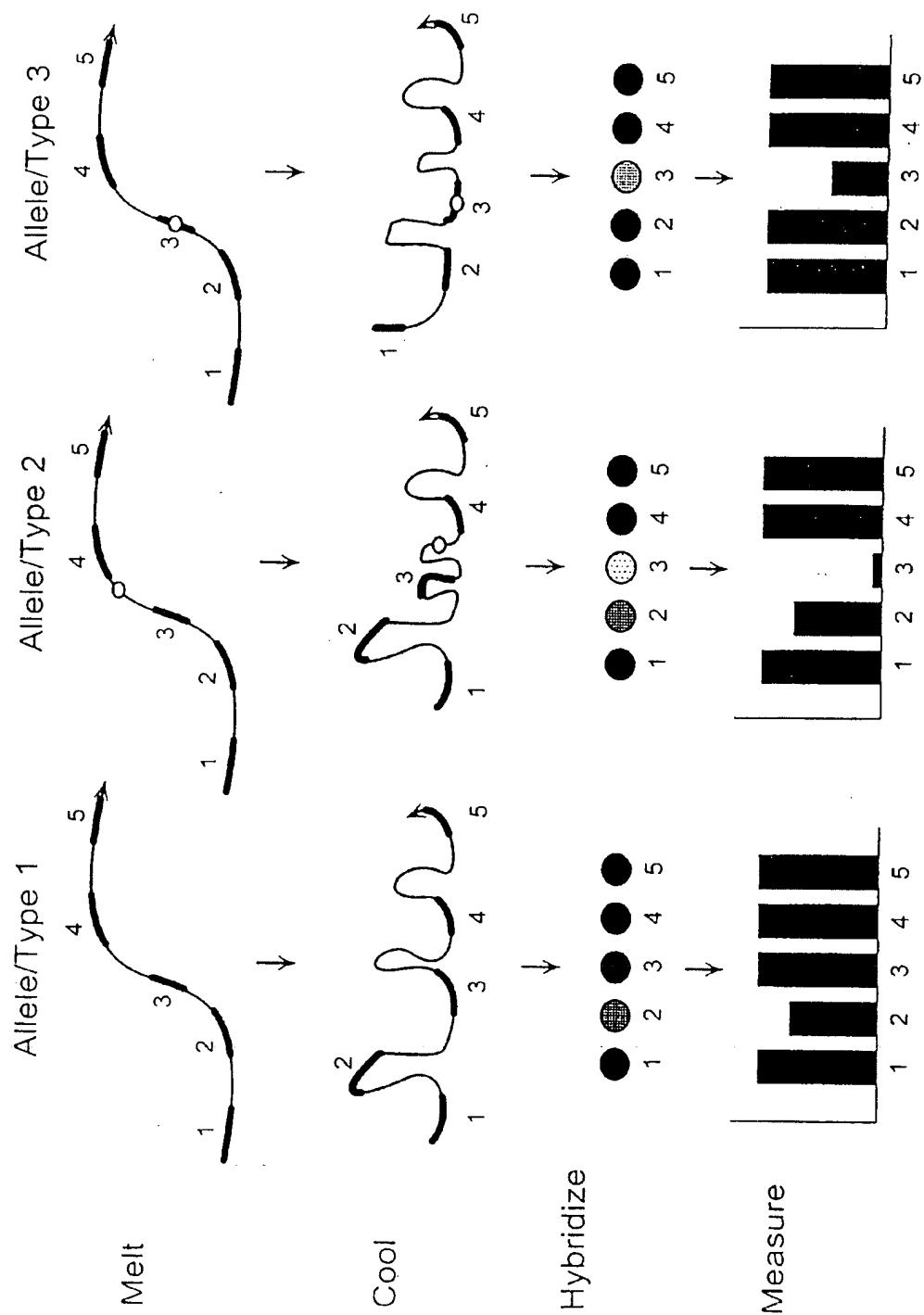




FIGURE 2

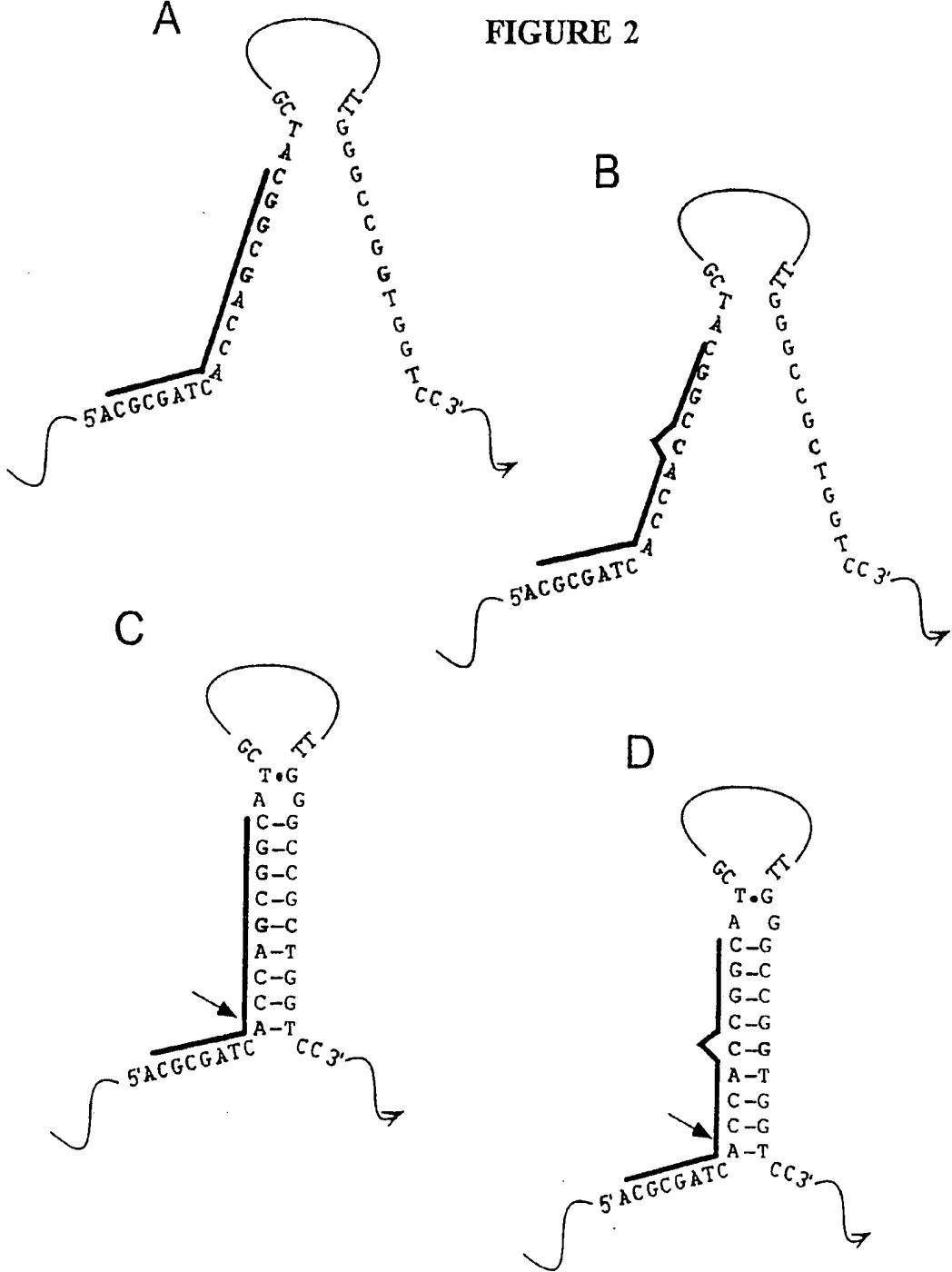
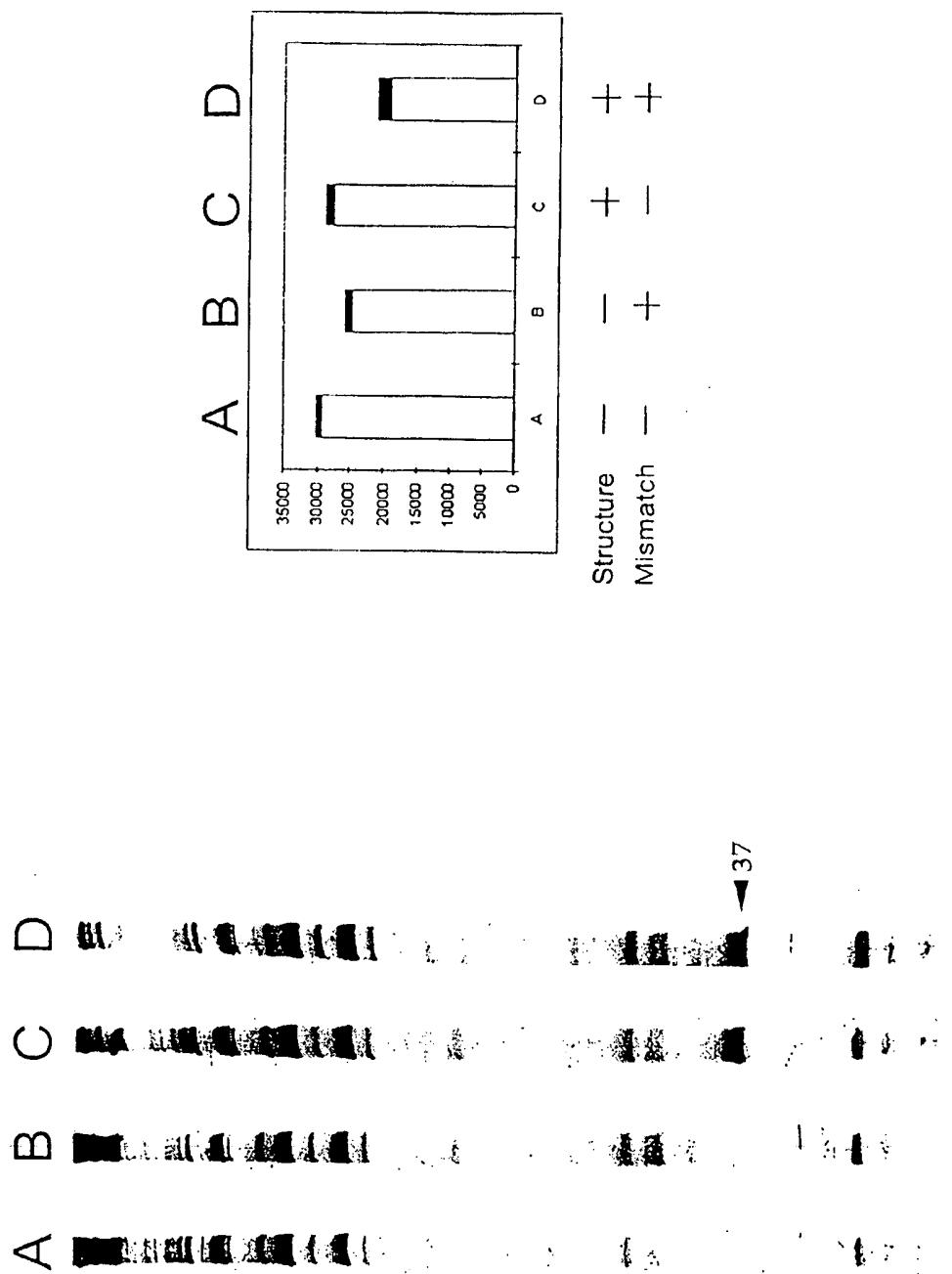




FIGURE 3





**FIGURE 4**

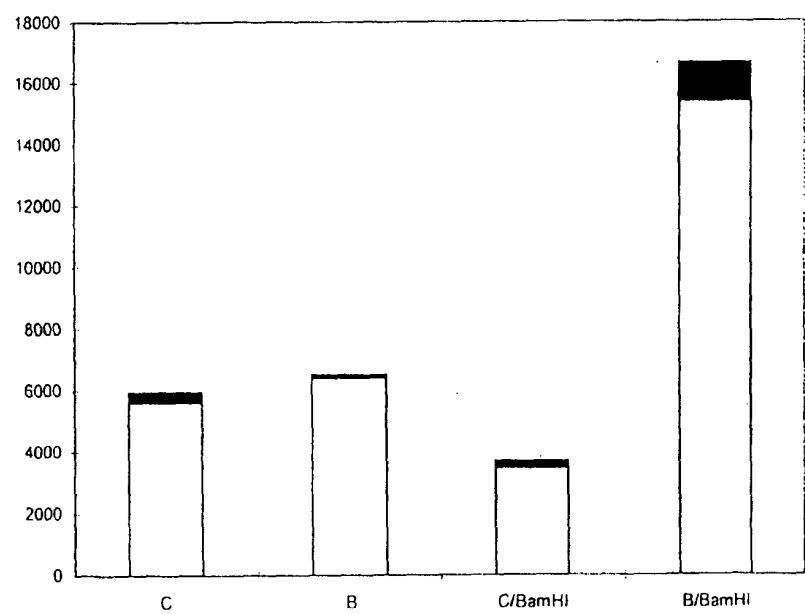


FIGURE 5

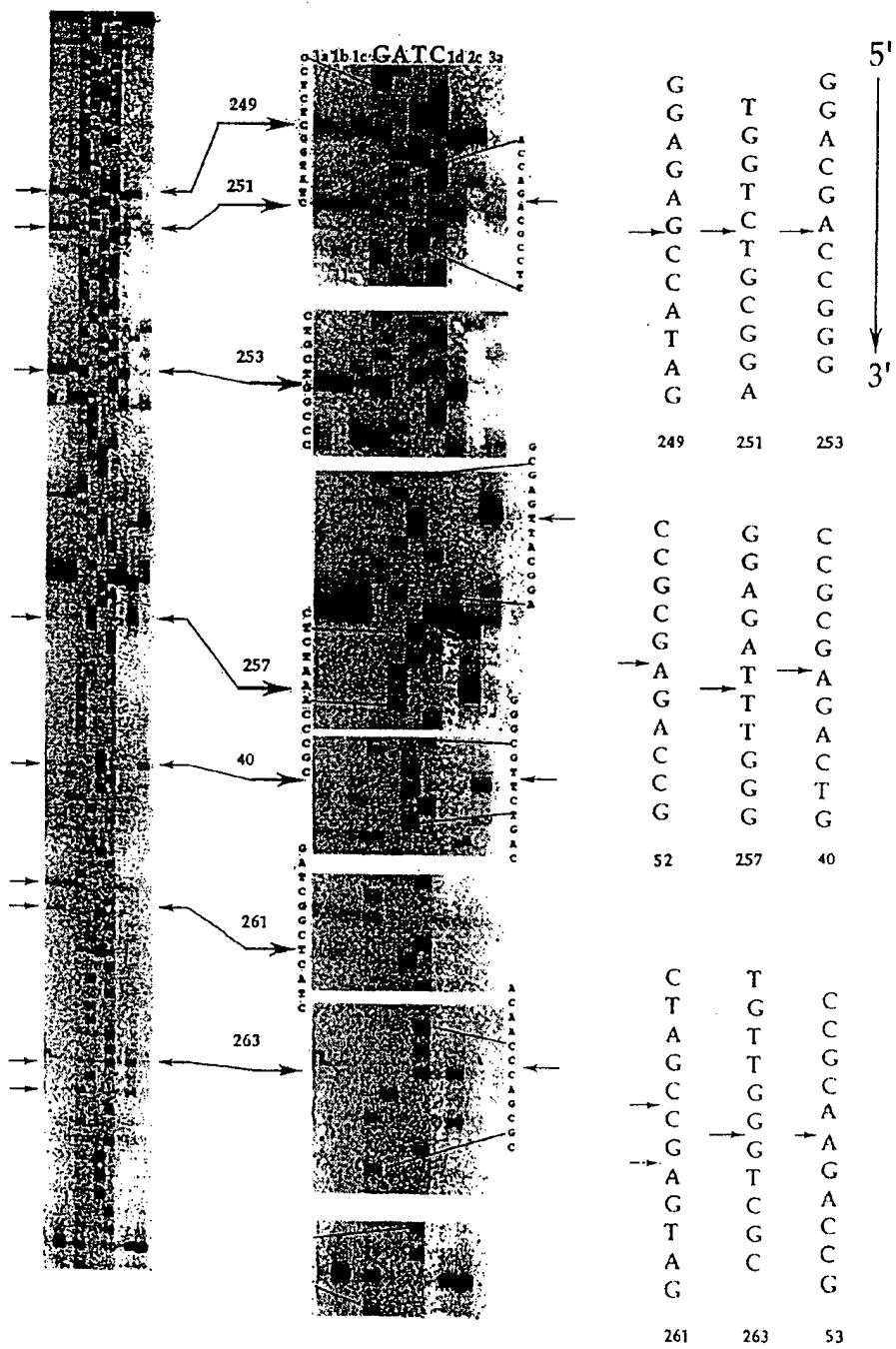


FIGURE 6



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Consensus: GATTCTCTCT TCACGGCAGAA AGCGTCTAGC CATGGCGTTA GTATGAGTGT CGTGAGCCT

HCV 1a - - - - -  
HCV 1b - - - - -  
HCV 2c - - - - -  
HCV 3a - - - - -

#249 CCAGGACCCC CCCTCCCGGG AGAGCCATAG TGGTCTGCCG AACCGGTGAG TACACGGAA

- - - - -  
- T - - -  
- C - - -  
- - - - -

#251 #257

TGCCAGGAC GACCGGGTCC TTTCTTGGAT CAACCCGCTC AATGCCCTGGAA GATTGGGGCG

- - - - -  
- - - - -  
- G - - A - - T - - -  
- C - - TG - - GT - - -

#253

TGCCAGGAC GACCGGGTCC TTTCTTGGAT CAACCCGCTC AATGCCCTGGAA GATTGGGGCG

- - - - -  
- - - - -  
- A - - A - -  
- G - - - - -

#40 #261 #263

TGCCCGGCA AGACTGCTAG CCGAGTAGTG TGGGGTCCGCG AAAGGCCTTG TGGTACTGCC

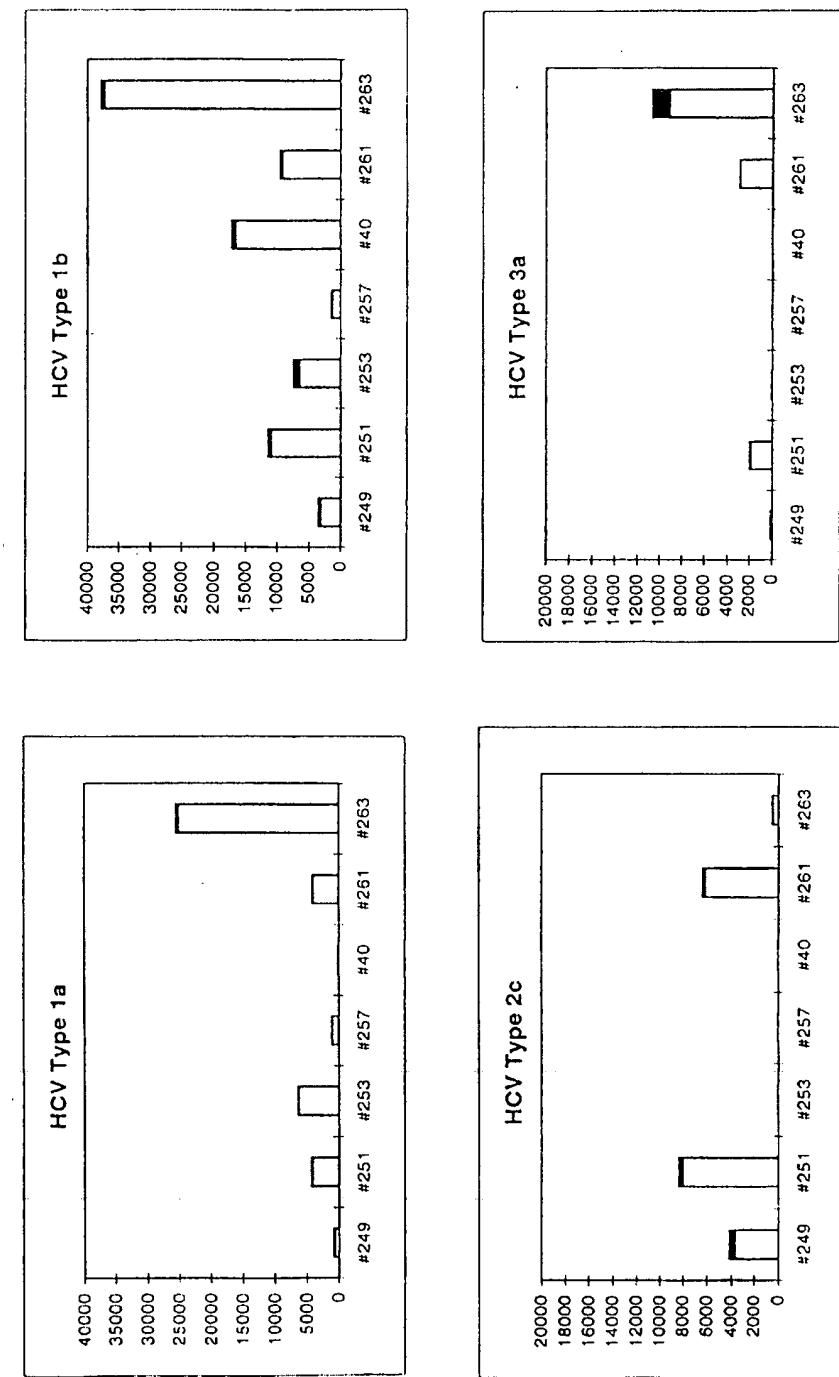
- - - - -  
- - - - -  
- G - - - -  
- G - - TCA - -

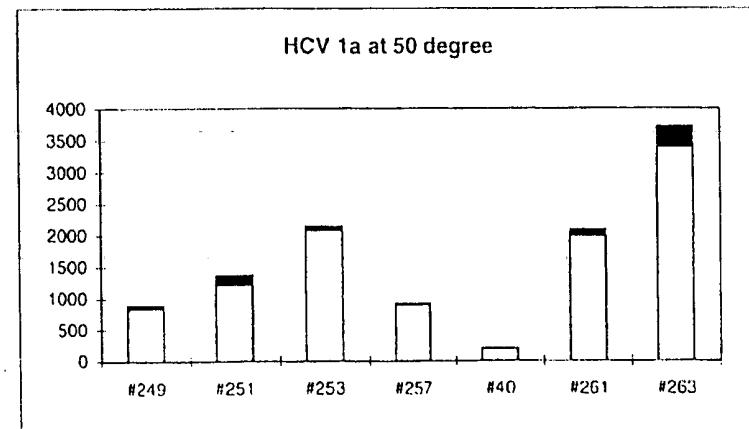
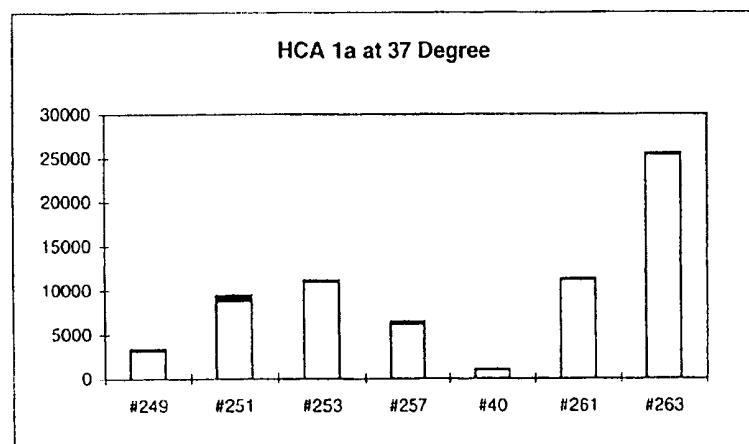
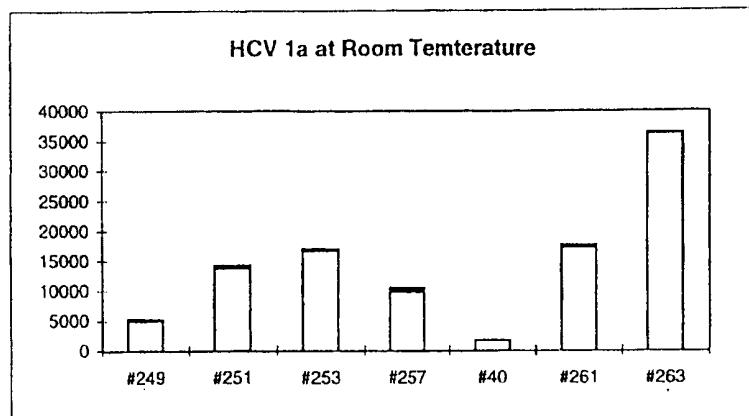
TGATAGGGTG CTTGCGAGTG CCCGGGAGG TCTCGTAGAC CGTGCAATC

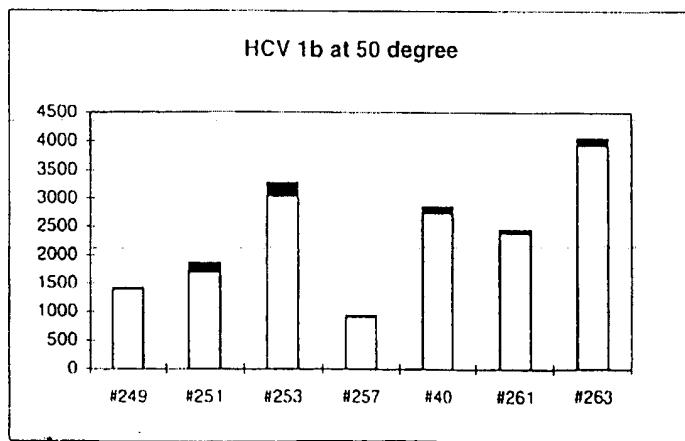
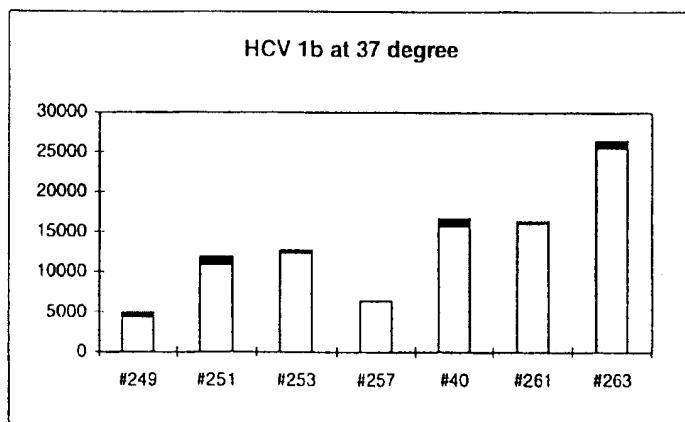
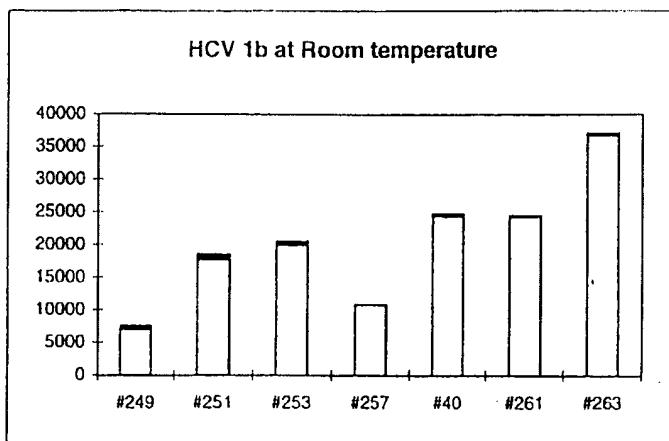
- - - - -  
- - - - -  
- A - - - -

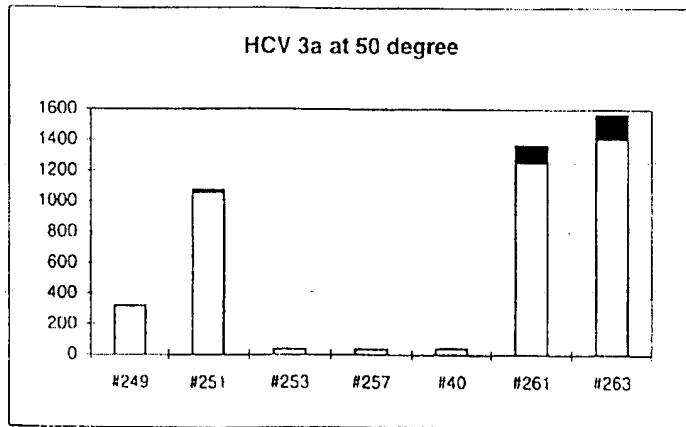
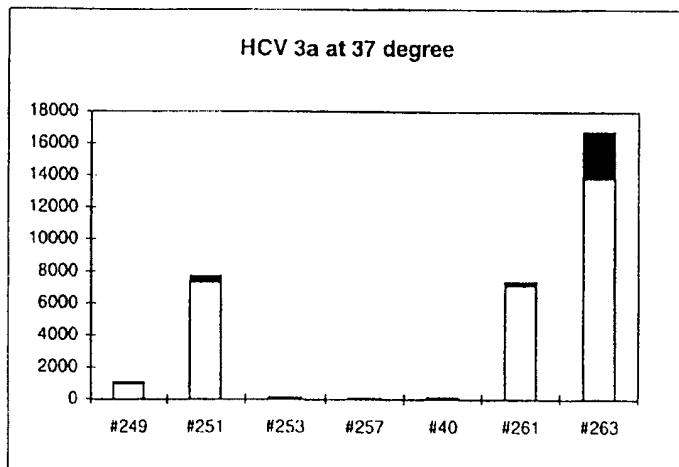
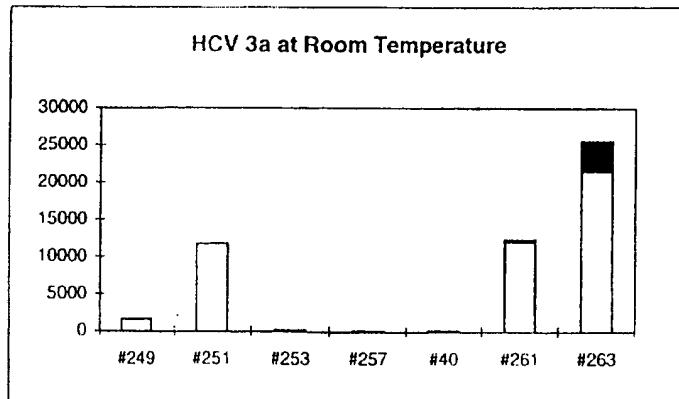


FIGURE 7



**FIGURE 8A**

**FIGURE 8B**

**FIGURE 8C**



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FIGURE 9A

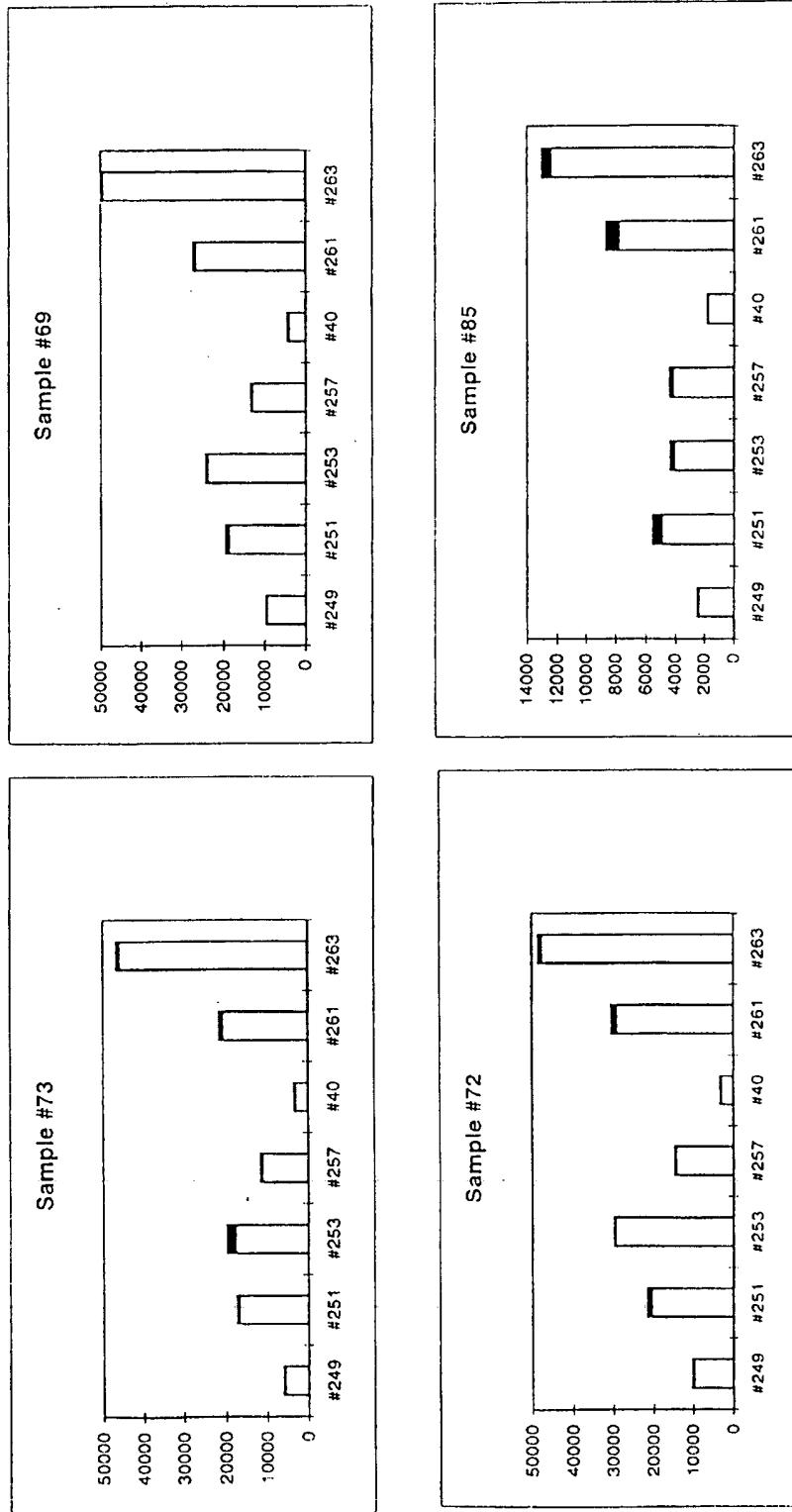




FIGURE 9B

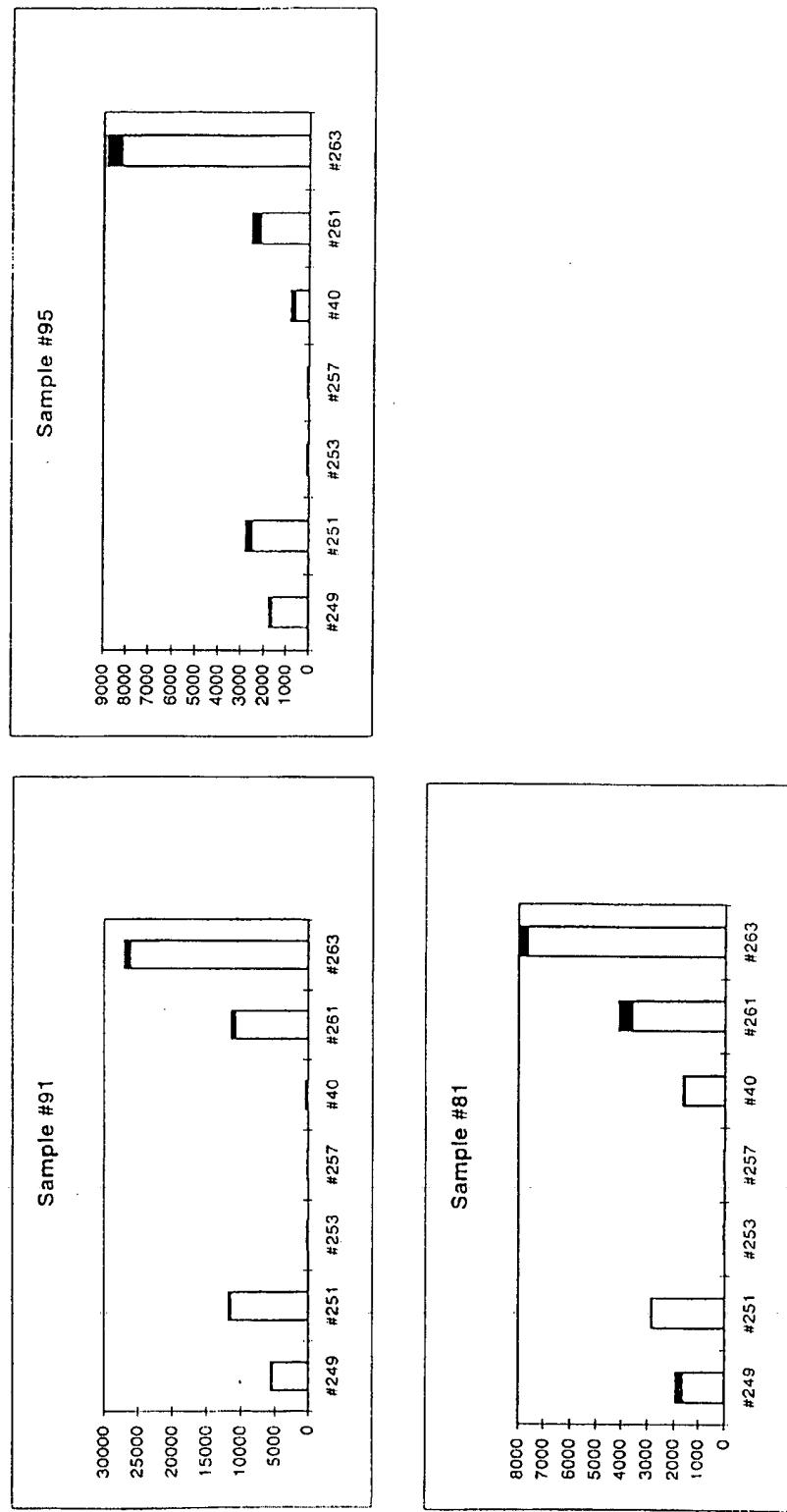




FIGURE 9C

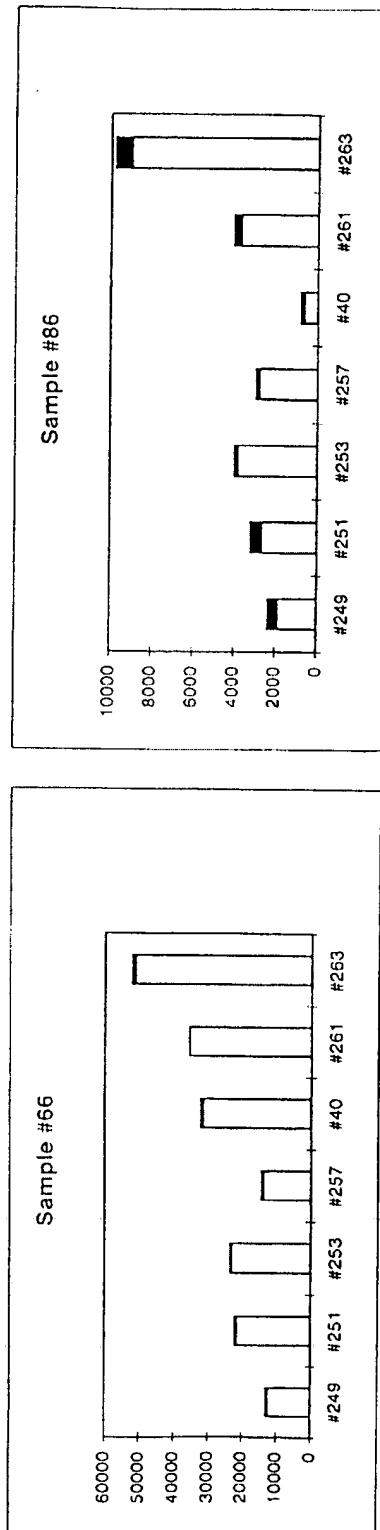
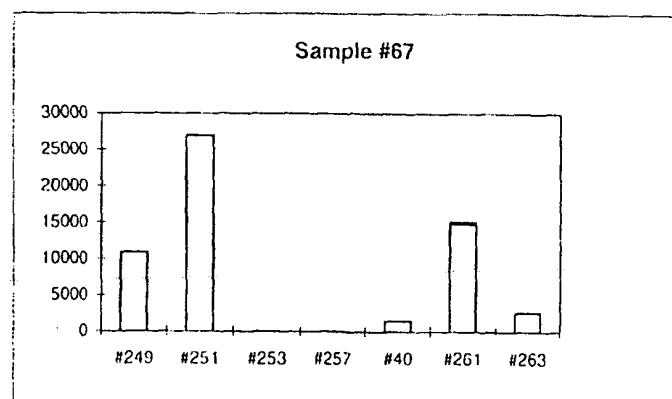
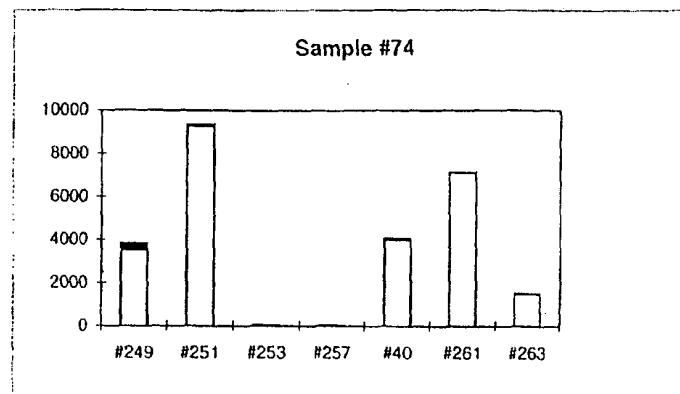




FIGURE 9D





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FIGURE 10

#80

A  
G A  
T — A  
C — G  
T — A  
G — C  
T — A  
C — G  
G — C  
C — G  
5' - 5' - FI-T G C T C T C T G G T      T G G T C T C T C G T A A T - 3'

#81

A  
G A  
T — A  
C — G  
T — A  
G — C  
T T  
C C  
G — C  
C — G  
5' - 5' - FI-T G C T C T C T G G T      T G G T C T C T C G T A A T - 3'

#82

A  
G A  
T T  
C T  
T T  
G T  
T T  
C T  
G T  
C T  
5' - 5' - FI-T G C T C T C T G G T      T G G T C T C T C G T A A T - 3'



## FIGURE 11A

#2) 5' Biotin  
|  
T A  
C G A  
A T — A  
G C — G  
A T — A  
C G — C  
A T — A  
G C — G  
C G — C  
G C — G

#80) 5' - F1-T G C T C T C T G G T T G G T C T C T C G T A A T -3'

#FD91) 3' Biotin - C G A G A G A C C A - 5'

A  
G A  
T — A  
C — G  
T — A  
G — C  
T — A  
C — G  
G — C  
C — G

#80) 5' - F1-T G C T C T C T G G T T G G T C T C T C G T A A T -3'

#78) 3' - A G A C C A T T A C C A G A -Biotin 5'

#4) 3' - G A G A C C A T T A C C A G A G -Biotin 5'

#79) 3' - A G A G A C C A T T A C C A G A G A -Biotin 5'

↓ ↓

#116) 3' - A G A G A C C A A C C A G A G A -Biotin 5'

#117) 3' - T A C C A G A G A -Biotin 5'

#118) 3' - A G A G A C C A T - 5'



FIGURE 11B

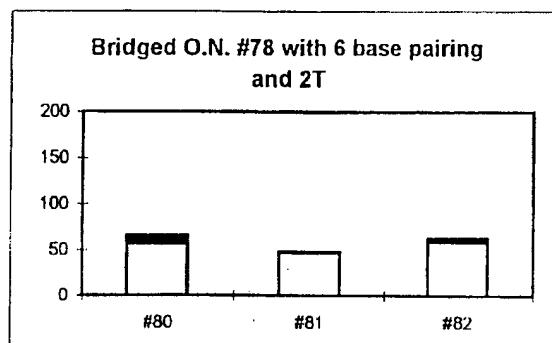
A  
 G A  
 T — A  
 C — G  
 T — A  
 G — C  
 T — A  
 C — G  
 G — C  
 C — G  
 #80) 5' - F1-T G C T C T C T G G T      T G G T C T C T C G T A A T -3'  
 #79) 3' - A G A G A C C A - T T - A C C A G A G A - Biotin 5'

A  
 G A  
 T — A  
 C — G  
 T — A  
 G — C  
 T — A  
 C — G  
 G — C  
 C — G  
 #80) 5' - F1-T G C T C T C T G G T      T G G T C T C T C G T A A T -3'  
 3' - A G A G A C C A      A C C A G A G A - Biotin 5'  
 #115      T      T      #114  
 A      A  
 C      C  
 A ←→ C      C ←→ A  
 A      A  
 G      G  
 C ←→ A      A ←→ C  
 G      G  
 A      A  
 Biotin 5'      3'

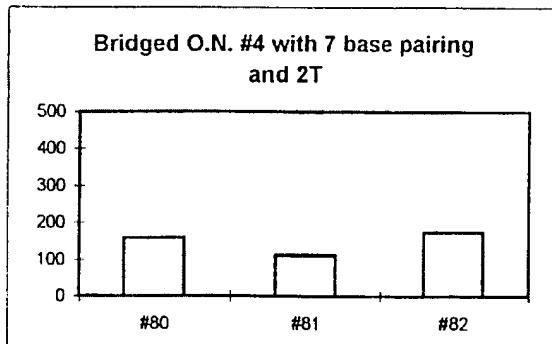


FIGURE 12

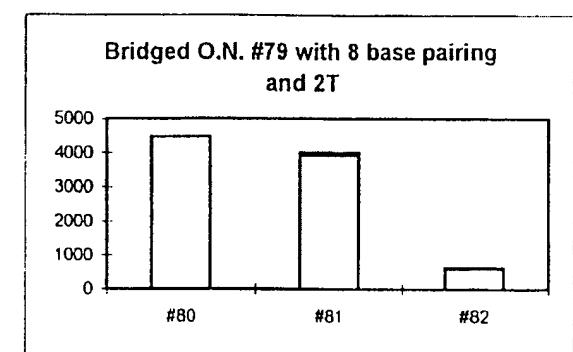
A.



B.



C.



D

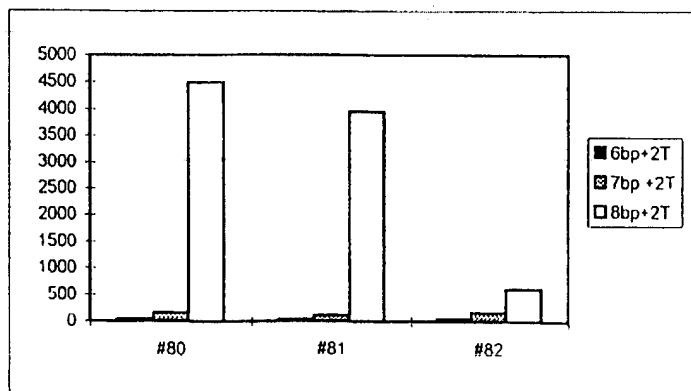
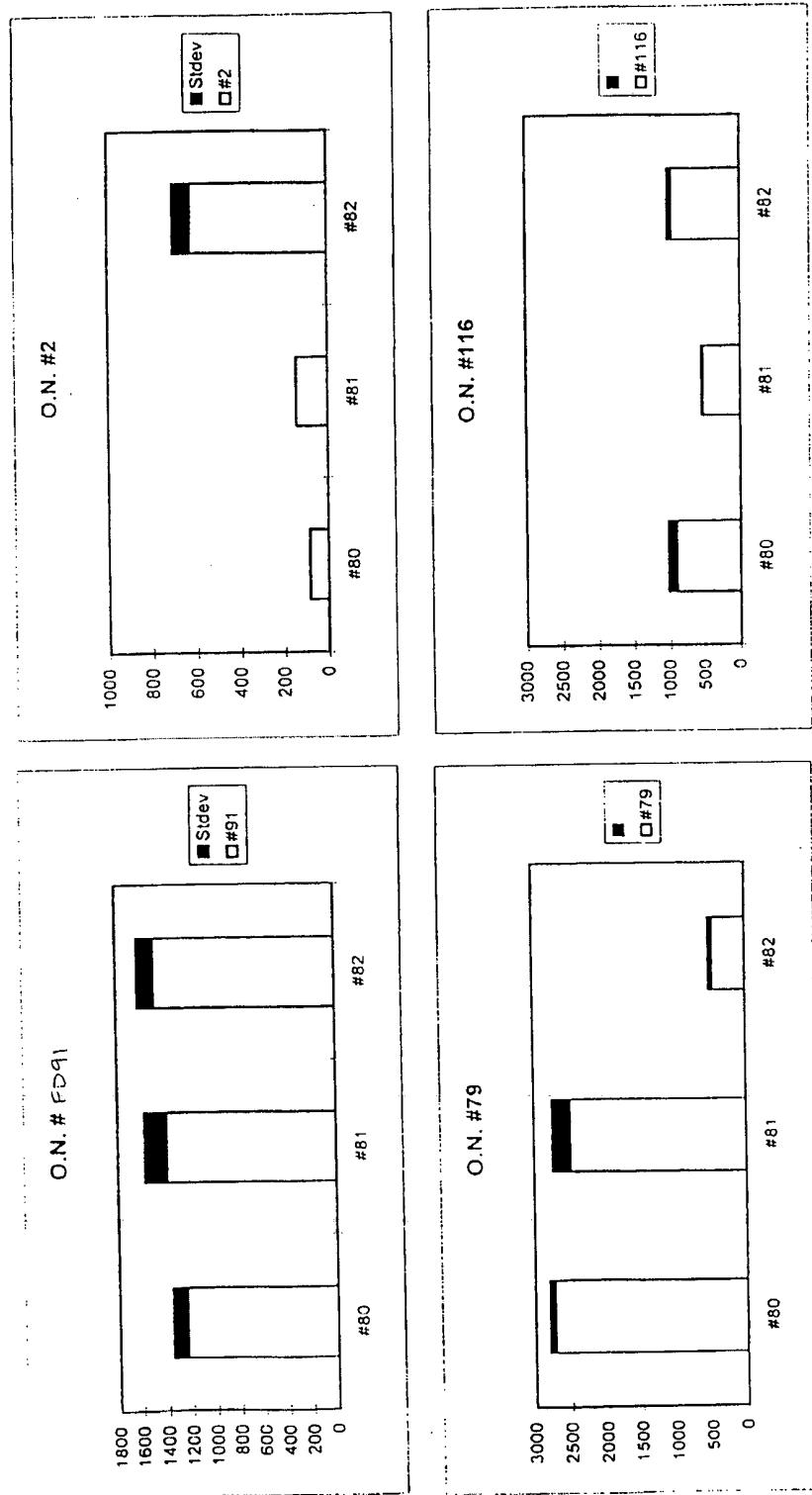




FIGURE 13A





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FIGURE 13B

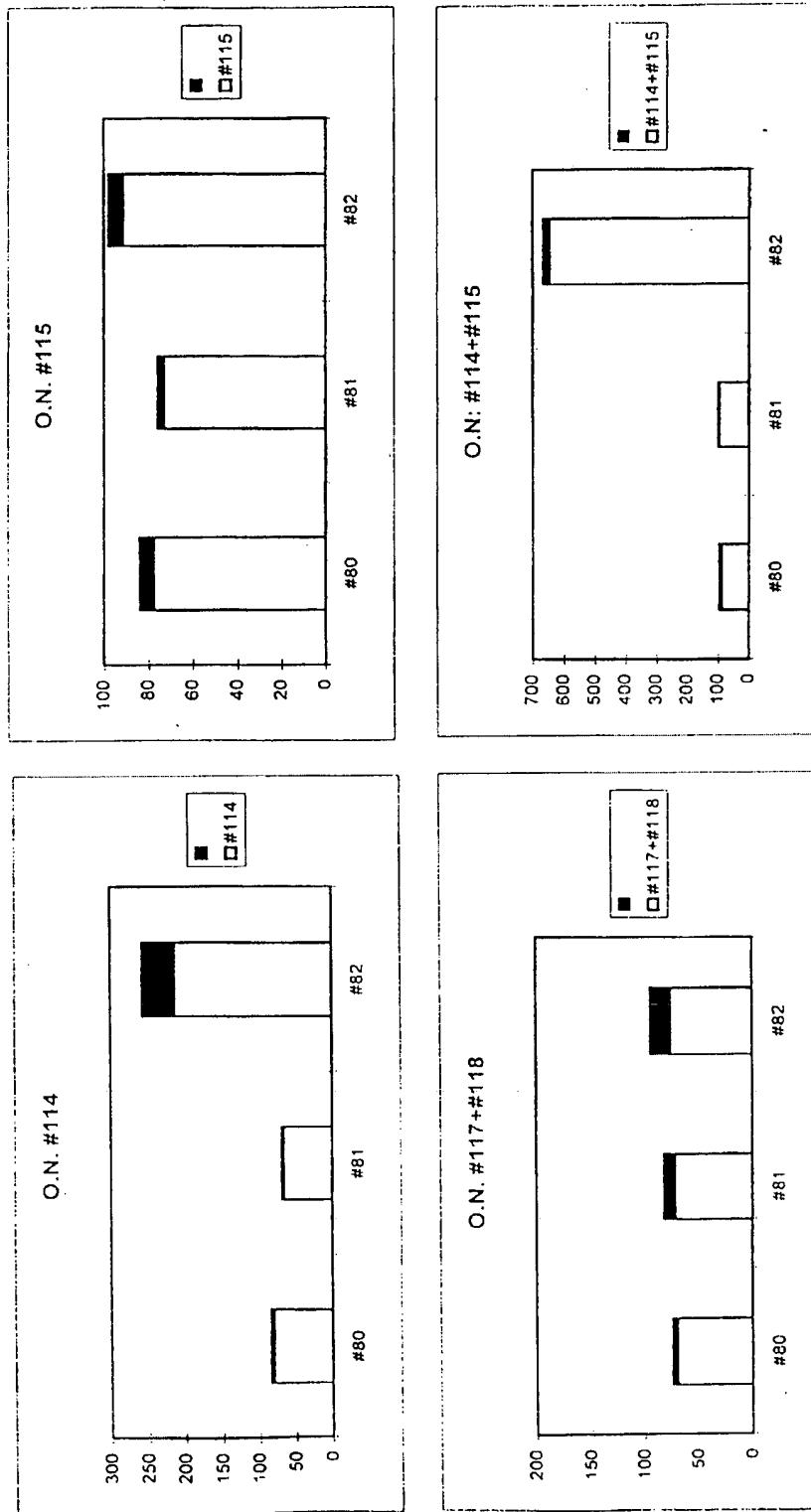




FIGURE 14

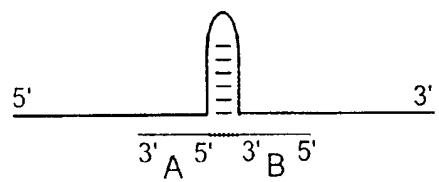
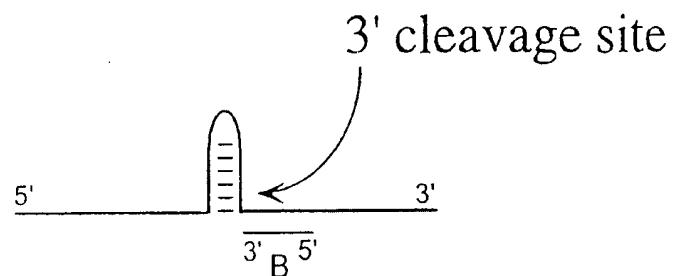
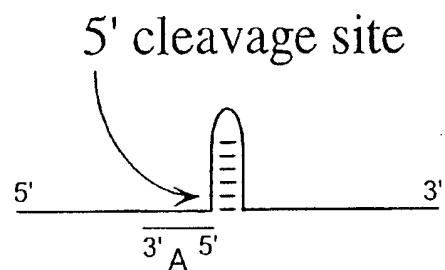
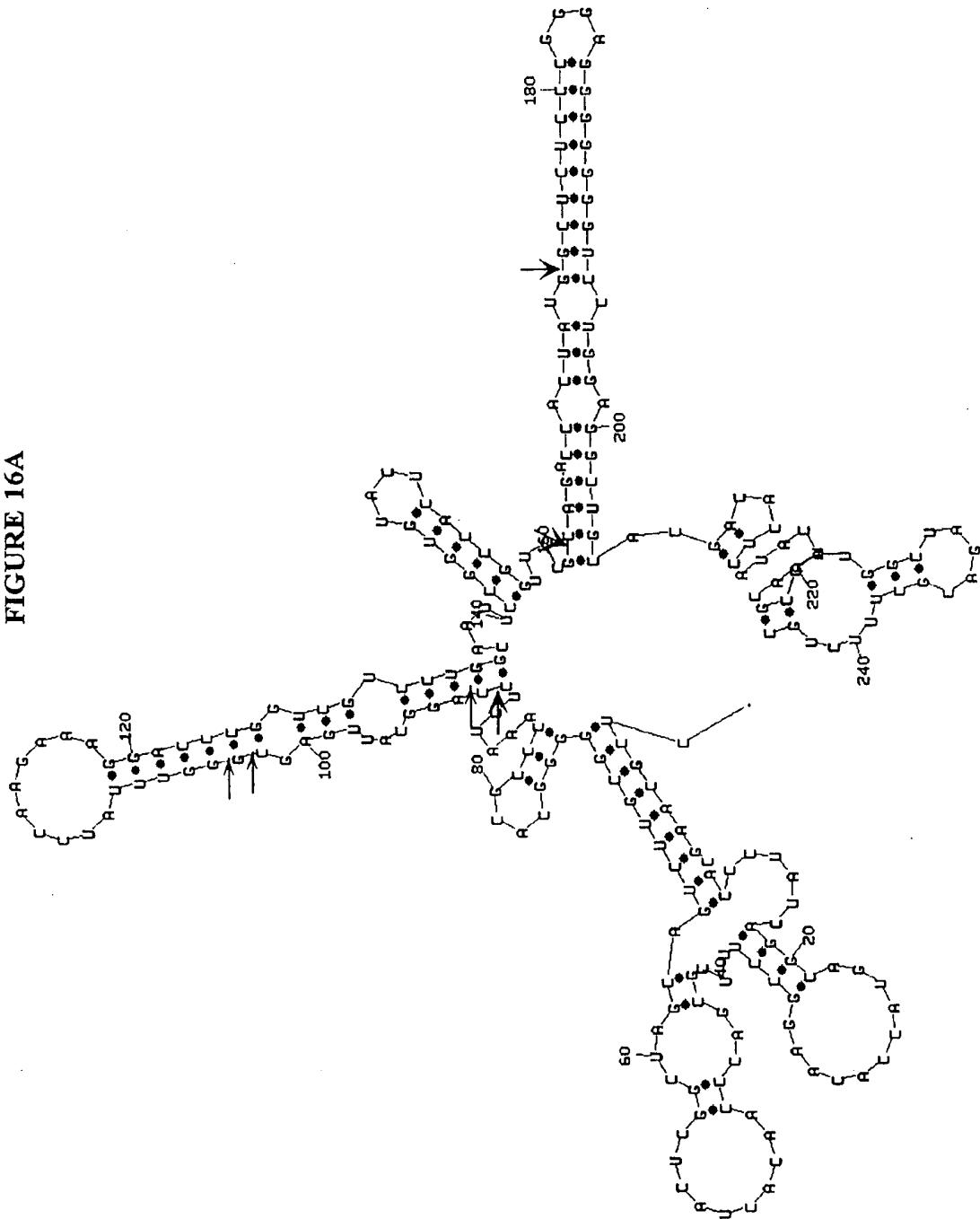




FIGURE 15



FIGURE 16A



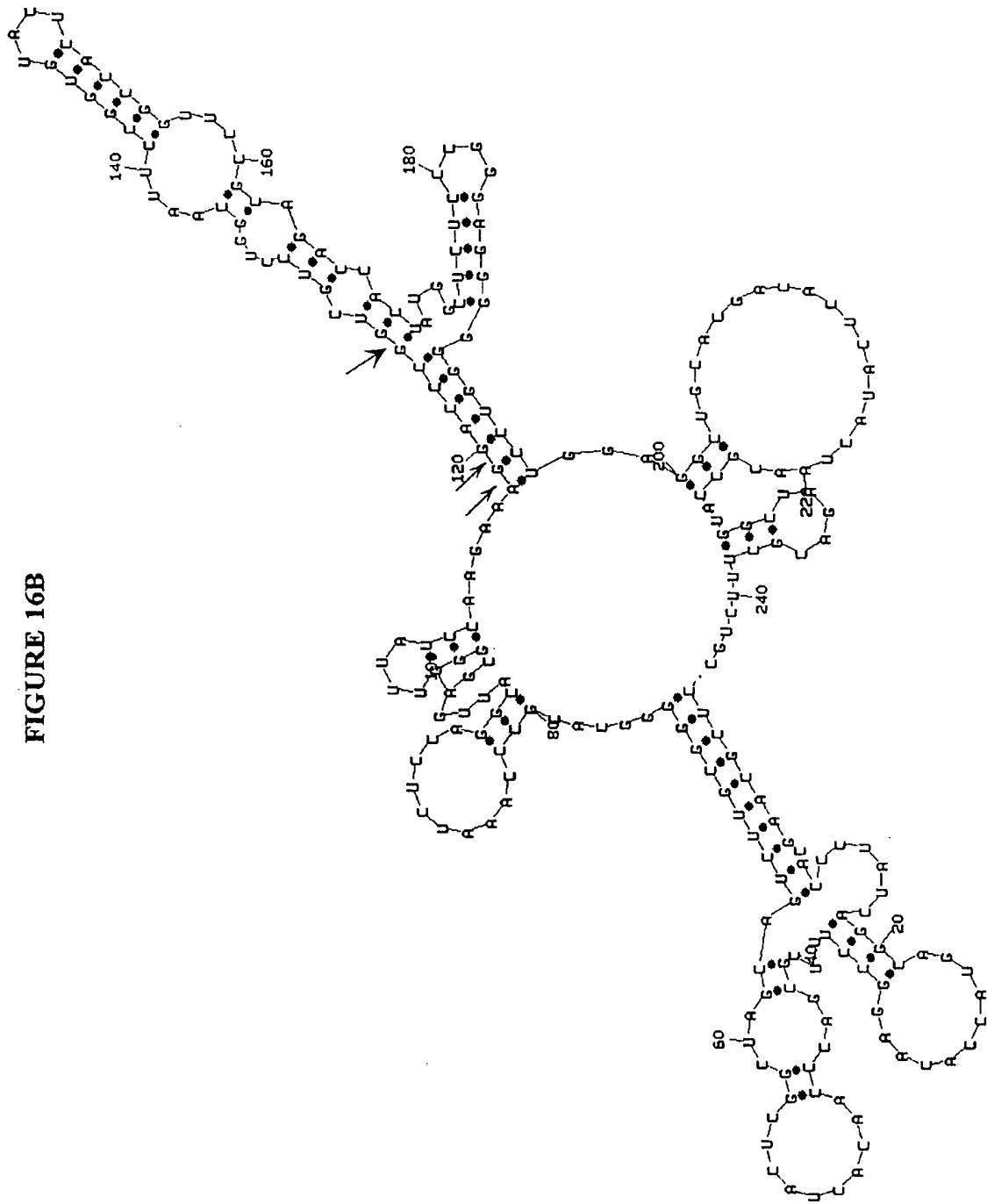
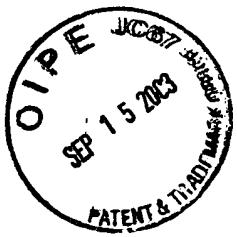
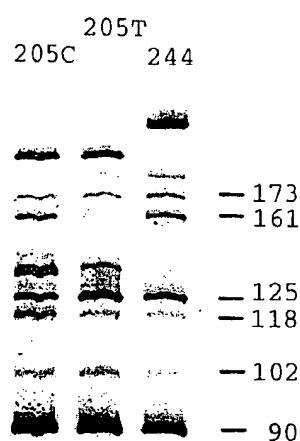


FIGURE 16B



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FIGURE 17A



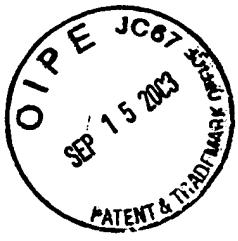
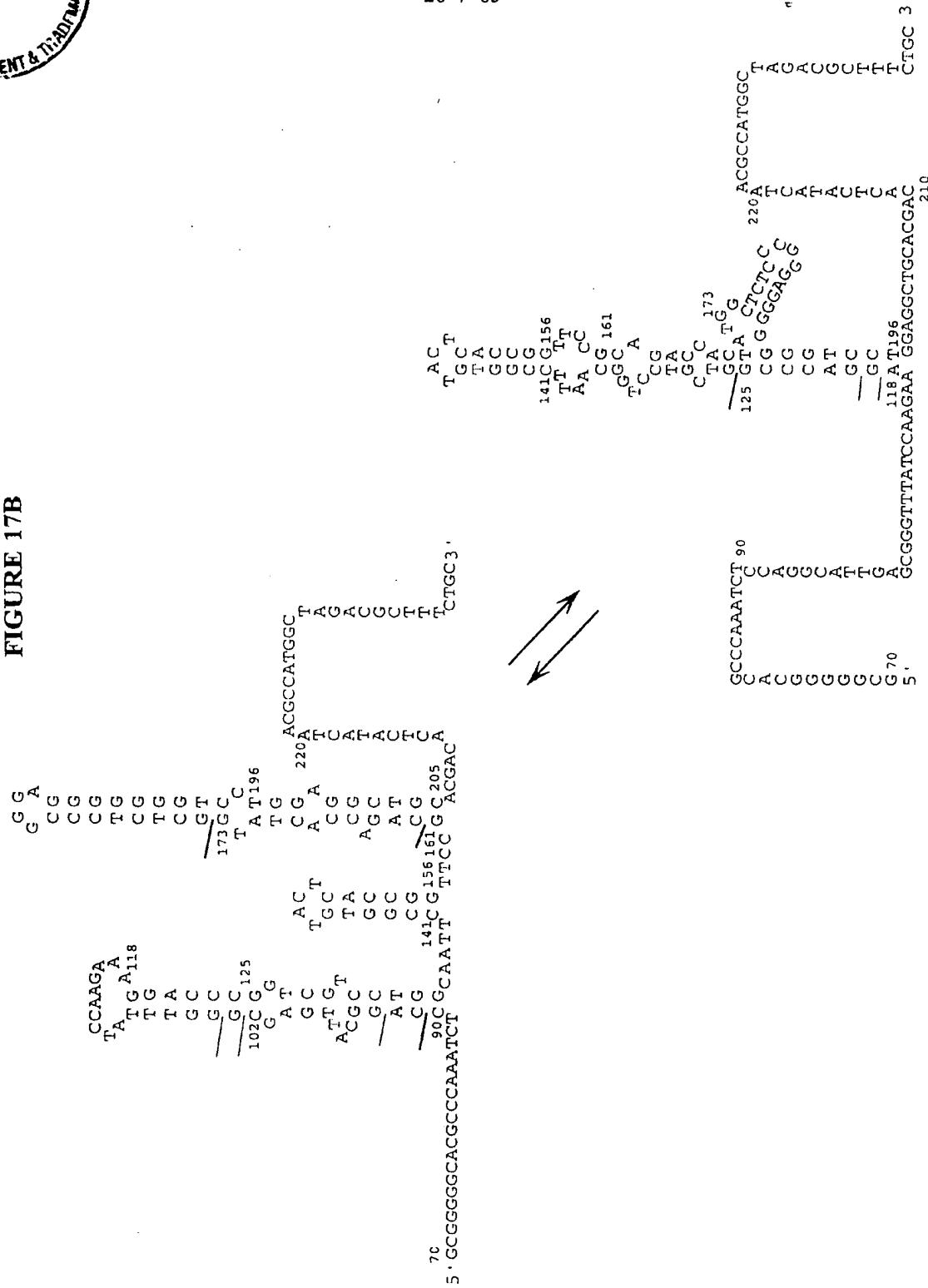


FIGURE 17B



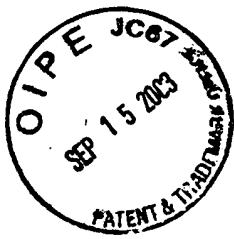


FIGURE 17C

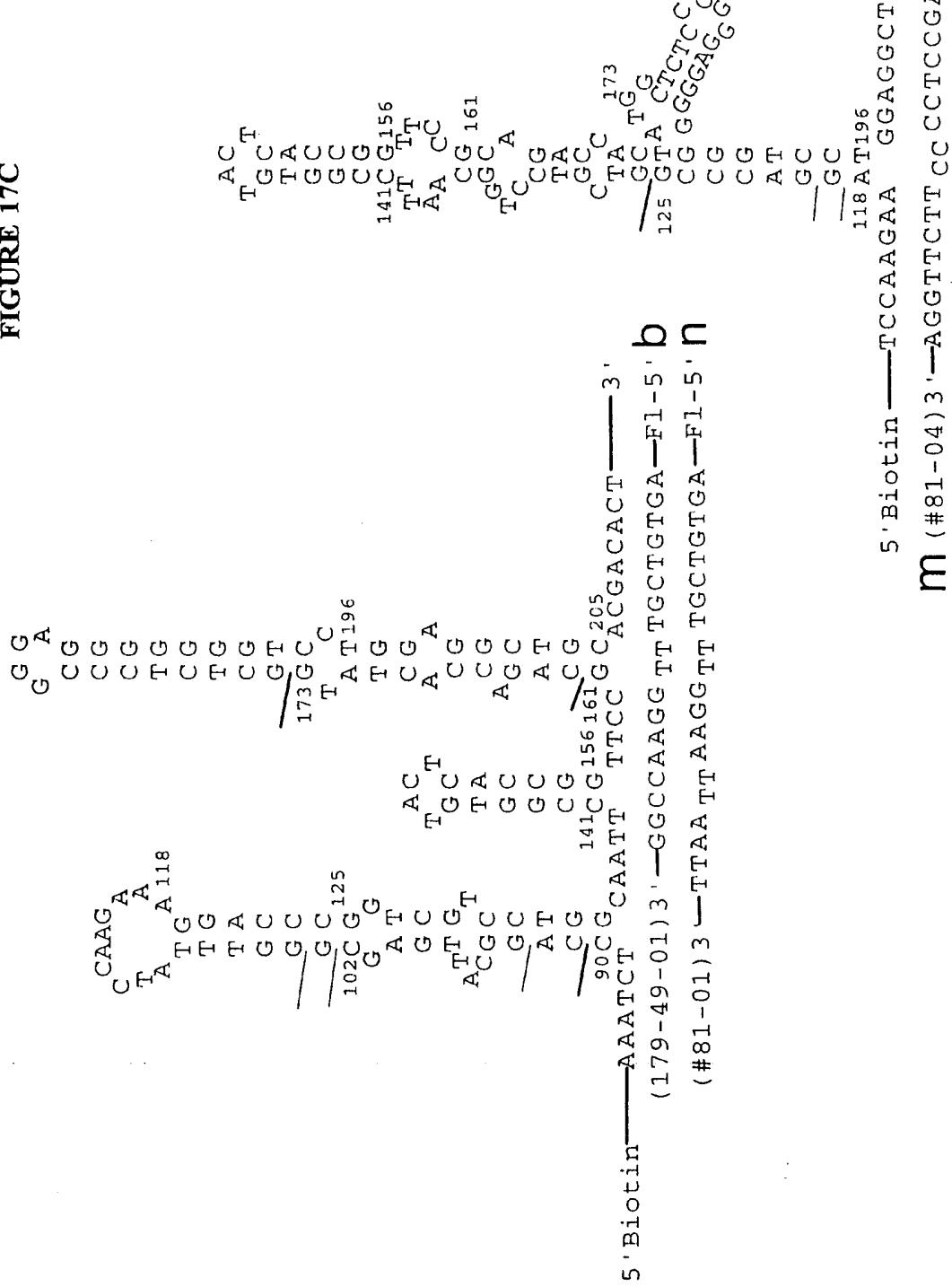




FIGURE 18A

**HCV 1a**

G G  
 G A  
 C G  
 C G  
 C AAG  
 T A  
 A A 118  
 T G  
 T G  
 T A  
 G C  
 G C  
 G C  
 102 C G 125  
 G G  
 A T  
 G C  
 A T G T  
 C G C  
 G C  
 A T  
 C G  
 70 90 C G 141 C G 156 161 G C 205  
 5' TGCGGGGCACGCCAAATCT CAATT TTCC ACGACACT - 3'  
 (179-49-01) 3' GGCC AAGG TT TGCT GTGA 5' **b**  
 (192-72-01) 3' GGCC AAGG AA TGCT GTGA 5' **i**  
 (192-72-02) 3' GGCC AAGG AC TGCT GTGA 5' **j**  
 (192-72-03) 3' GGCC AAGG - TGCT GTGA 5' **k**  
 (192-72-04) 3' GGC C TT TGCT GTGA 5' **C**  
 (192-72-05) 3' GGCC AAGG TT TGCA GTGA 5' **d**



## FIGURE 18B

**HCV 1b**

	G G		
	G A		
	C G		
	C G		
T CCAAGA	C G		
A A	T G		
<b>G</b> G A <sup>118</sup>	C G		
T G	T G		
T A	C G		
G C	G T		
G C	173 G C		
G C	T C		
AT 102 C G <sup>125</sup>	A T <sup>196</sup>		
G C <sup>70</sup>	T G		
A T	C G		
CG	G C		
GC	T A C		
CG	T G C		
TG	A T G T		
TG	C G C		
TG	T A		
CG C A	G C		
CG C	A G C		
GC	A T		
GC	C G		
GC	G C		
GC	A G C		
GC	C G		
GC	G C		
GC	T G C <sup>205</sup>		
CAAATCT	CAATT	TTCC	ACGACACT-3'
(179-49-01) 3' GGCC <sup>90</sup> CAAGG <u>TT</u> TGCTGTGA 5' b			
(192-72-01) 3' GGCC <sup>90</sup> CAAGG <u>AA</u> TGCTGTGA 5' j			
(192-72-02) 3' GGCC <sup>90</sup> CAAGG <u>AC</u> TGCTGTGA 5' j			
(192-72-03) 3' GGCC <sup>90</sup> CAAGG — TGCTGTGA 5' k			
(192-72-04) 3' GGC <sup>CT</sup> TAGG <u>TT</u> TGCTGTGA 5' C			
(192-72-05) 3' GGCC <sup>90</sup> CAAGG <u>TT</u> TGC <sup>A</sup> GTGA 5' d			



### FIGURE 18C

**HCV 2a/c**

AAG  
 C A  
 C A<sup>118</sup>  
 A T A  
 T G  
 T G G G A  
 T A G G  
 G C C G  
 G C C G  
 G C C G  
 G C T G  
 102 T A<sup>125</sup> G G A  
 G A T G  
 G C T G  
 G C C G  
 A T G C  
 T A T G C  
 C G C G  
 G C T G  
 G C C G  
 90 C G A C A A  
 C G T T G C G  
 G C T A C G  
 G A G C A G C  
 T A G C A T  
 A T C G C G  
 156 161 G T G<sup>205</sup>  
 5' — CACGCCCAA T C G 141 TTCC ACGACACT — 3'  
 (179-49-01) 3' GGCCAAGG TT TGCTGTGA 5' **b**  
 (192-72-01) 3' GGCCAAGG AA TGCTGTGA 5' **i**  
 (192-72-02) 3' GGCCAAGG AC TGCTGTGA 5' **j**  
 (192-72-03) 3' GGCCAAGG — TGCTGTGA 5' **k**  
 (192-72-04) 3' GGCCTAGG TT TGCTGTGA 5' **C**  
 (192-72-05) 3' GGCCAAGG TT TGCAGTGA 5' **d**



FIGURE 18D

**HCV 3a**

CAAG  
 C A  
 T A                    G A  
 T A 118            G G  
 G G                    G G  
 T G                    C G  
 T A                    C G  
 G C                    C G  
 G C                    T G  
 G C                    C G  
 102 C G 125            T G  
 G G                    C T  
 A T                    G C  
 G C                    173 G C  
 A T T A C            T A T 196  
 T G C                    T G  
 G C                    C G  
 G C T T            A A  
 T A                    C G  
 90 C G                    T A                    C G  
 T C G C            A G C  
 T G                    G C                    A T  
 T A                    G C                    A T  
 A T                    C G                    C G  
 A T C G 156 161 G C 205  
 5' — CACGCCCA            TTCC            AC G A C A C T — 3'  
 (179-49-01) 3' G G C C A A G G            T T            T G C T G T G A 5' b  
 (192-72-01) 3' G G C C A A G G            A A            T G C T G T G A 5' i  
 (192-72-02) 3' G G C C A A G G            A C            T G C T G T G A 5' j  
 (192-72-03) 3' G G C C A A G G — T G C T G T G A 5' k  
 (192-72-04) 3' G G C C T A G G            T T            T G C T G T G A 5' C  
 (192-72-05) 3' G G C C A A G G            T T            T G C A G T G A 5' d



FIGURE 19

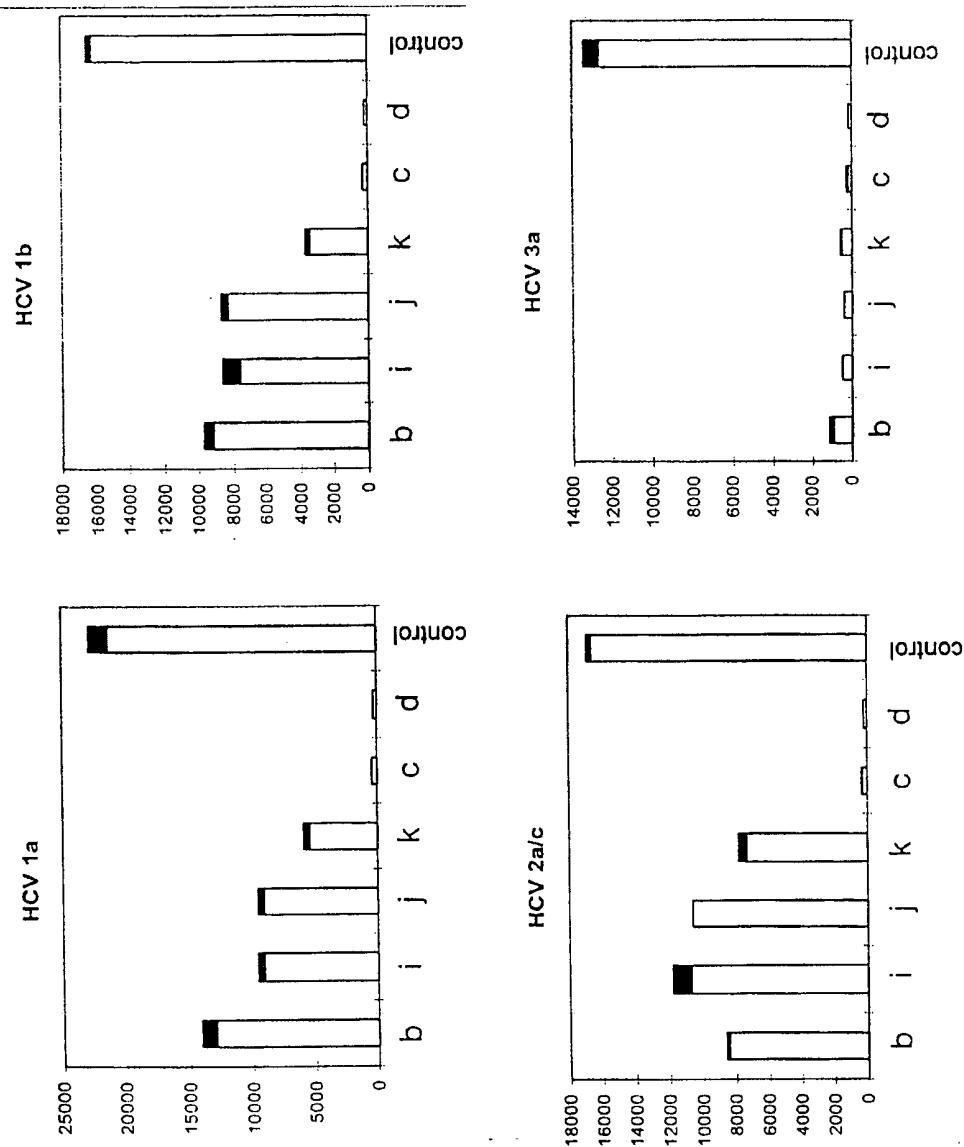




FIGURE 20A

G G  
G A

CG

CG

CG

CG

TG

CG

CG

TG

CG

GT

173 GC

C

T A T 196

TG

CG

A A

CG

CG

AGC

AT

CG

5'—CAATTCCGGTGTACTCACCGGTTCC G C<sup>205</sup>

5'—ACGACACT—3'

### HCV 1a

3'—GGCCAAGGGTCTGGTGA—F1 '5' (205-13-02) **a**  
3'—GGCCAAGG TT—TGCTGTA—F1 '5' (179-49-01) **b**  
3'—GGCCTAGG TT—TGCTGTA—F1 '5' (192-72-04) **c**  
3'—GGCCAAGG TT—TGCAGTGA F1 '5' (192-72-05) **d**  
3'—GGCCAAGG—F1 5' (205-27-01) **e**



FIGURE 20B

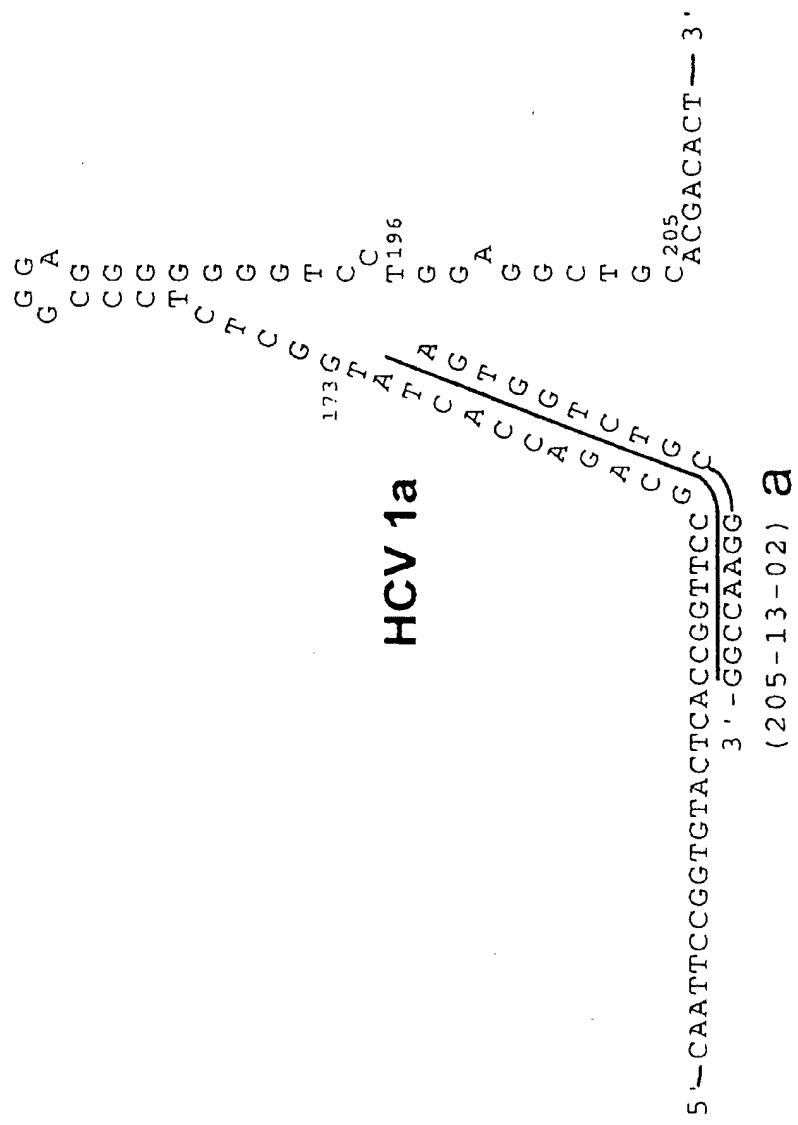




FIGURE 21

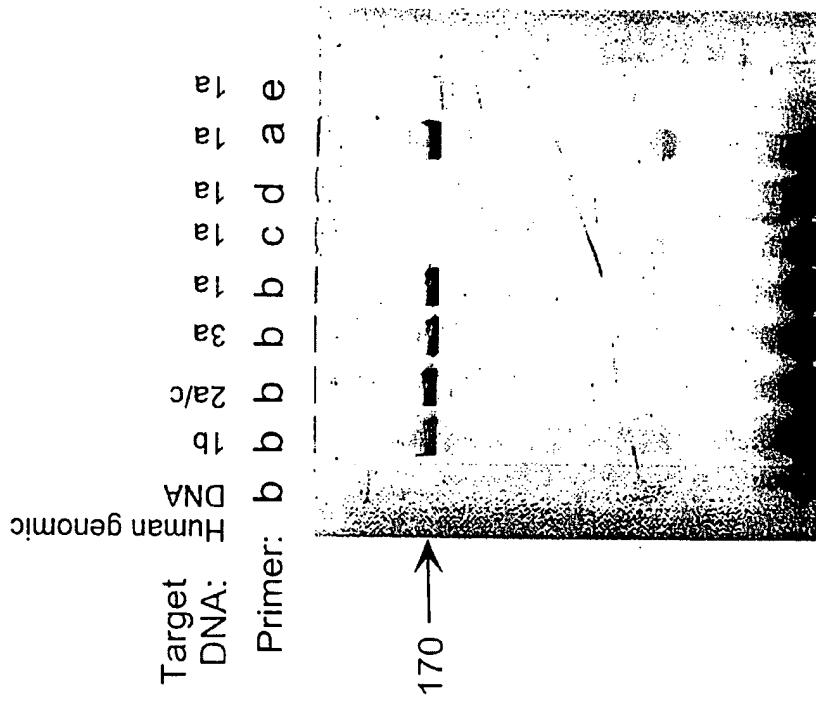
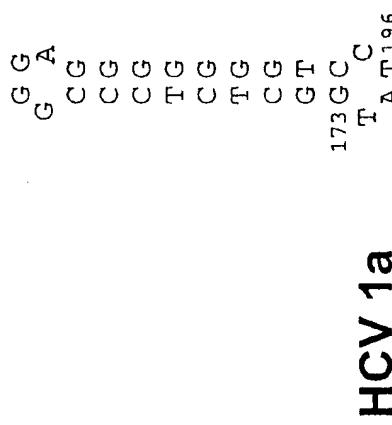




FIGURE 22



3' — GGCCAAGGGCGTCTGGTGA—F1 '5' (205-13-02) **a**  
3' — GGCCAAGGTTTGCTGTGA—F1 '5' (179-49-01) **b**  
3' — GGCCAAGG—F1 5' (205-27-01) **e**



FIGURE 23

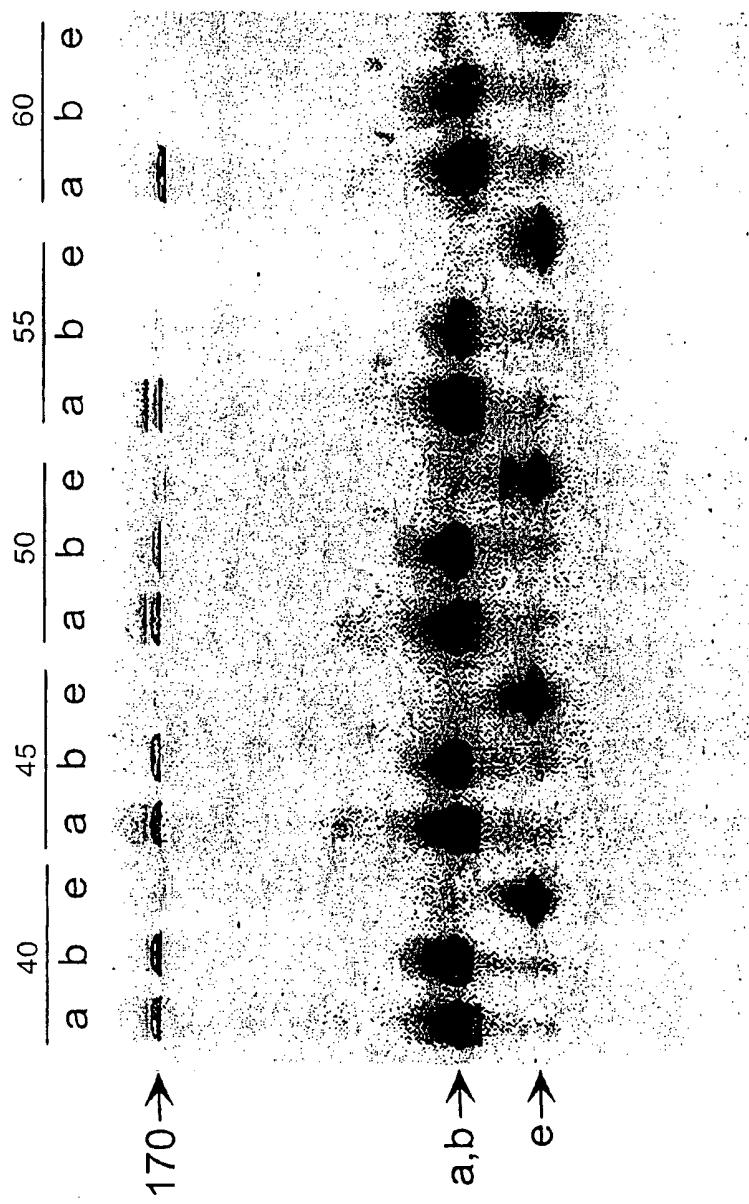


FIGURE 24

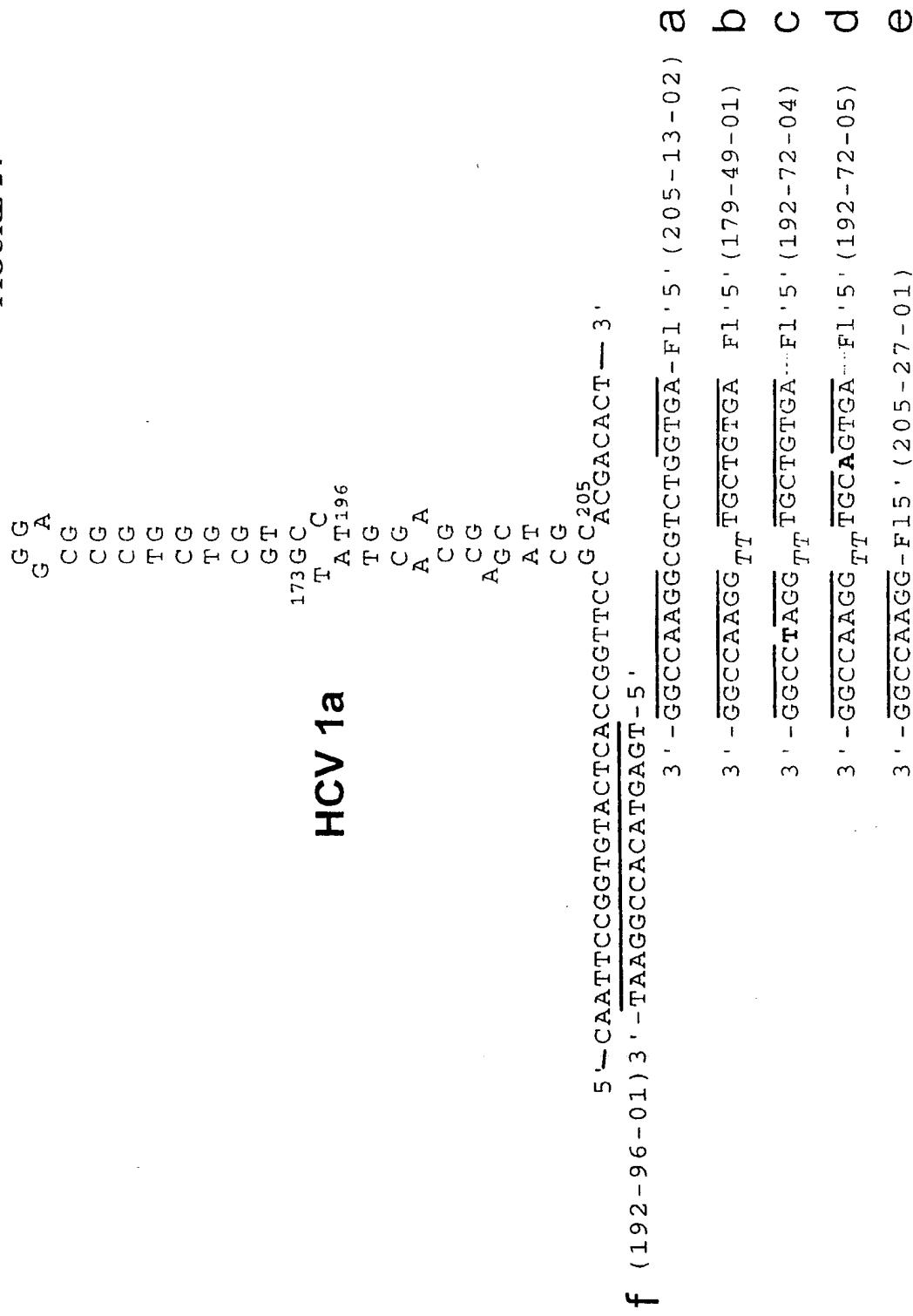




FIGURE 25

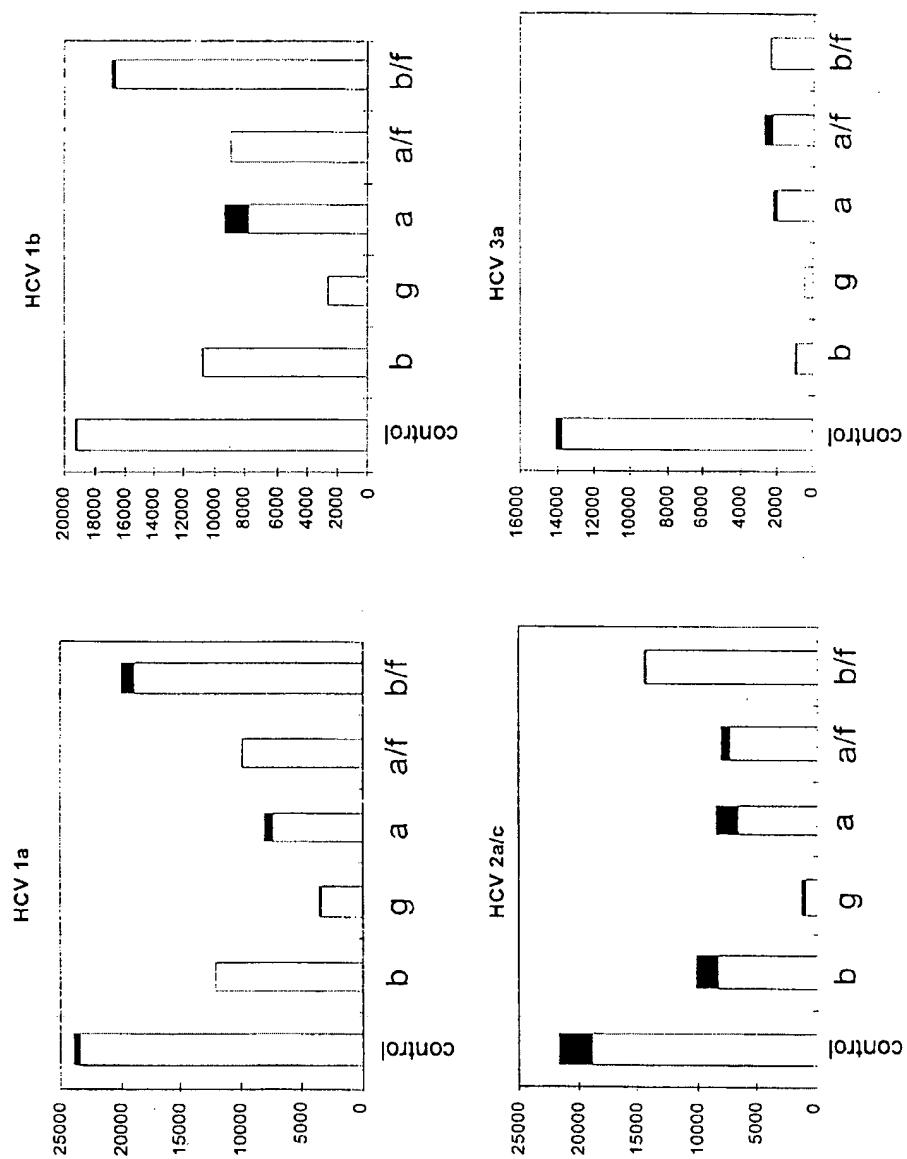




FIGURE 26

5' - ATTCGGTGTACTCACCGGTCCAAACGACACT-3' (205-13-01) **S.T.**

**f** (192-96-01) 3' - TAAGGCCACATGAGT-5'

3' - GGCCAAGGCCGTCTGGTGA-F1'5' (205-13-02) **a**

3' - GGCCAAGG TT TGCTGTGA-F1'5' (179-49-01) **b**

3' - GGCCTAGG TT TGCTGTGA-F1'5' (192-72-04) **c**

3' - GGCCAAGG TT TGCAAGTGA-F1'5' (192-72-05) **d**

3' - GGCCAAGG-F15' (205-27-01) **e**



FIGURE 27

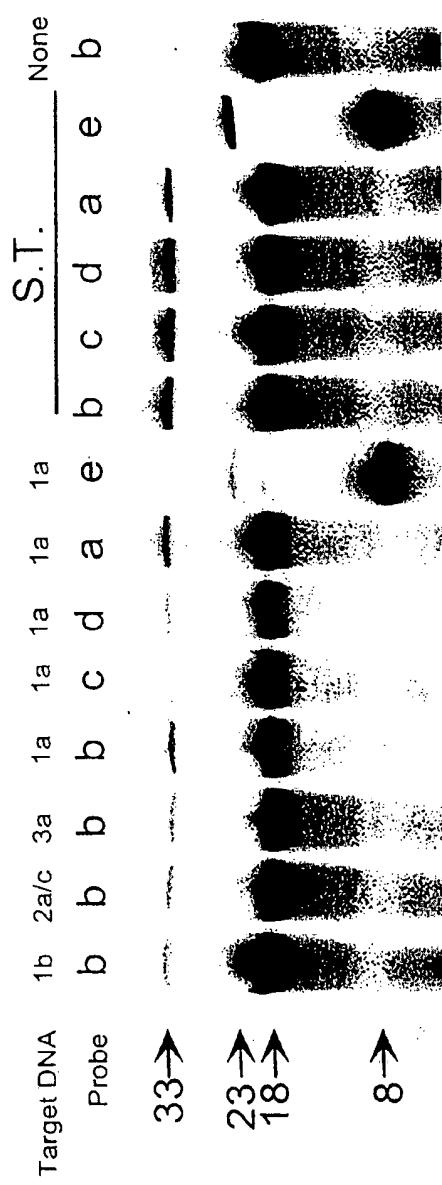




FIGURE 28

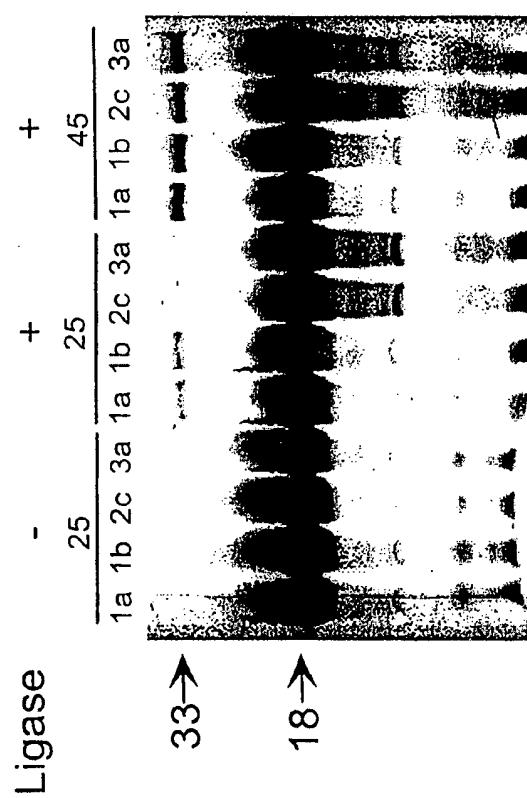




FIGURE 29A

G G  
 G A  
 C G  
 C G  
 C G  
 T G  
 C G  
 T G  
 C G  
 G T  
 173 G C  
 T A T 196  
 T G  
 C G  
 A A  
 C G  
 C G  
 A G C  
 A T  
 C G

**HCV 1a**

5'—C A A T T C C G G T G T A C T C A C C G G T C C G C 205  
 3'—G G C C A A G G C G T C T G G T G A—F1' 5' (2005-13-02) **a**  
 3'—G G C C A A G G T T T G C T G T G A—F1' 5' (179-49-01) **b**  
 3'—G G C C T A G G T T T G C T G T G A—F1' 5' (192-72-04) **c**  
 3'—G G C C A A G G T T T G C A G T G A F1' 5' (192-72-05) **d**  
 3'—G G C C A A G G—F1' 5' (2005-27-01) **e**  
 9 3'—T A G G C C A C A T G A G T G T T F1' 5' (192-96-02)



FIGURE 29B

5' - ATTCCGGTGTACTCACCGGTTCCAAACGACACT-3' (205-13-01) S.T.  
3' - GGCCAAGGGGTCTGGTGA-F1' 5' (205-13-02) a  
3' - GGCCAAGG TT TGCTGTGA--F1' 5' (179-49-01) b  
3' - GGCCTAGG TT TGCTGTGA--F1' 5' (192-72-04) c  
3' - GGCCAAGG TT TGCAAGTGA--F1' 5' (192-72-05) d  
3' - GGCCAAGG-F15' (205-27-01) e  
9 3' - TAAGGCCACATGAGTG TT (192-96-02)



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FIGURE 30

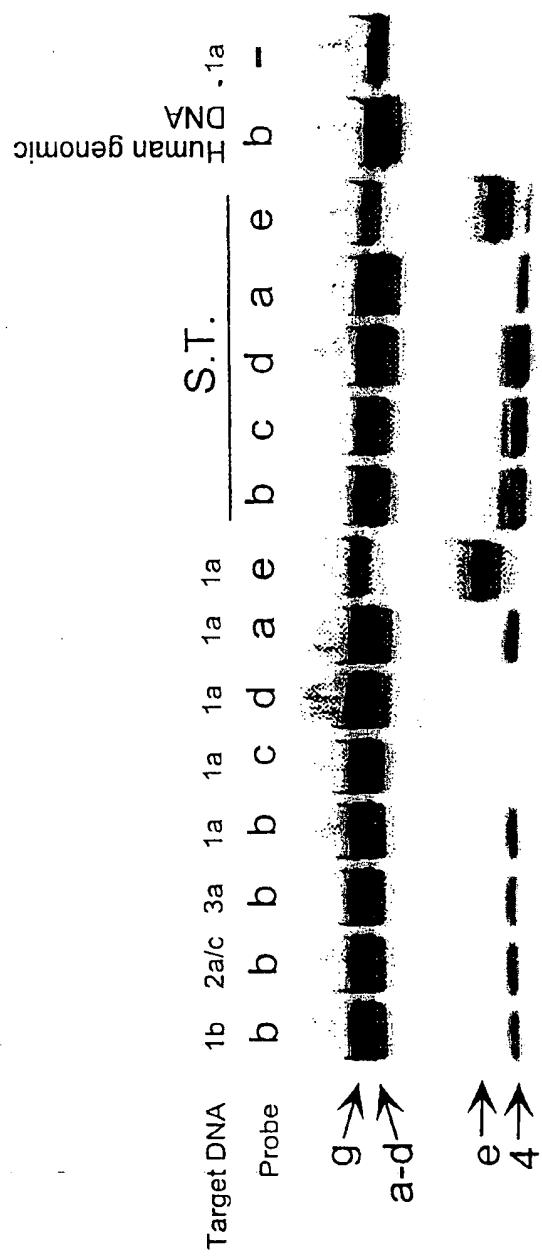




FIGURE 31

G G A  
 G C G  
 C G C  
 C G C  
 T G C  
 C G T G C  
 C G C  
 G T C  
 173 G C C  
 T A T 19  
 T G C G A  
 A C G C C  
 A C C

HCV 1a

5'-CAATTCCGGTTACTCACGGTTCC G<sup>205</sup> ACGACACT— 3'  
 3' -GGCCAAGG TT<sup>5'</sup> TGCTGTGA--Fl 5' (179-49-01)

h (10 bp) 3' - CACATGAGTG T<sub>T</sub>T<sub>T</sub>-F1'5' (205-81-01)



FIGURE 32

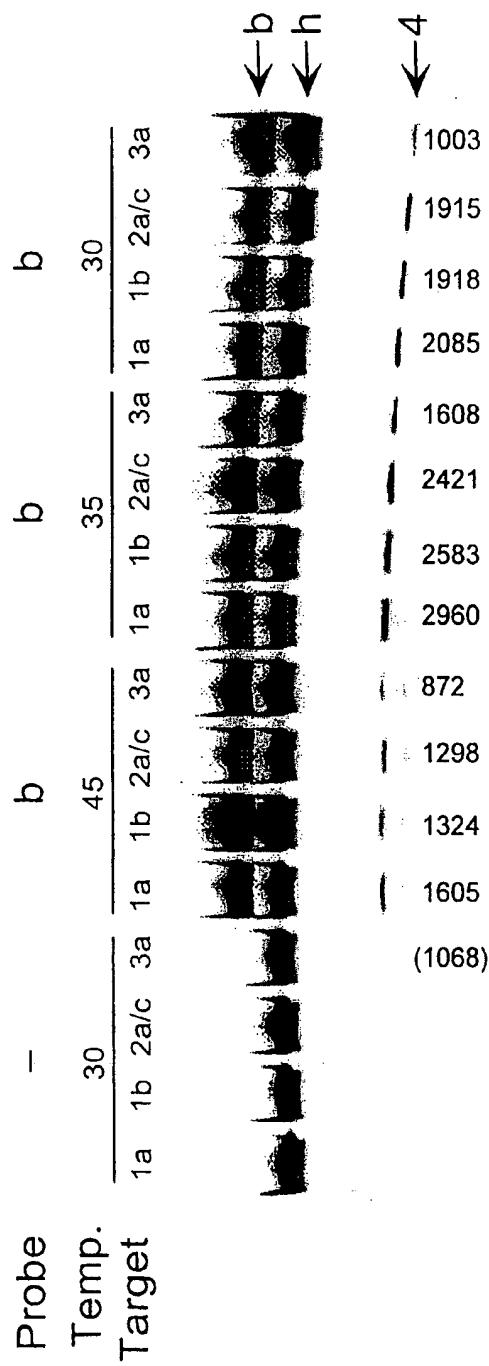




FIGURE 33

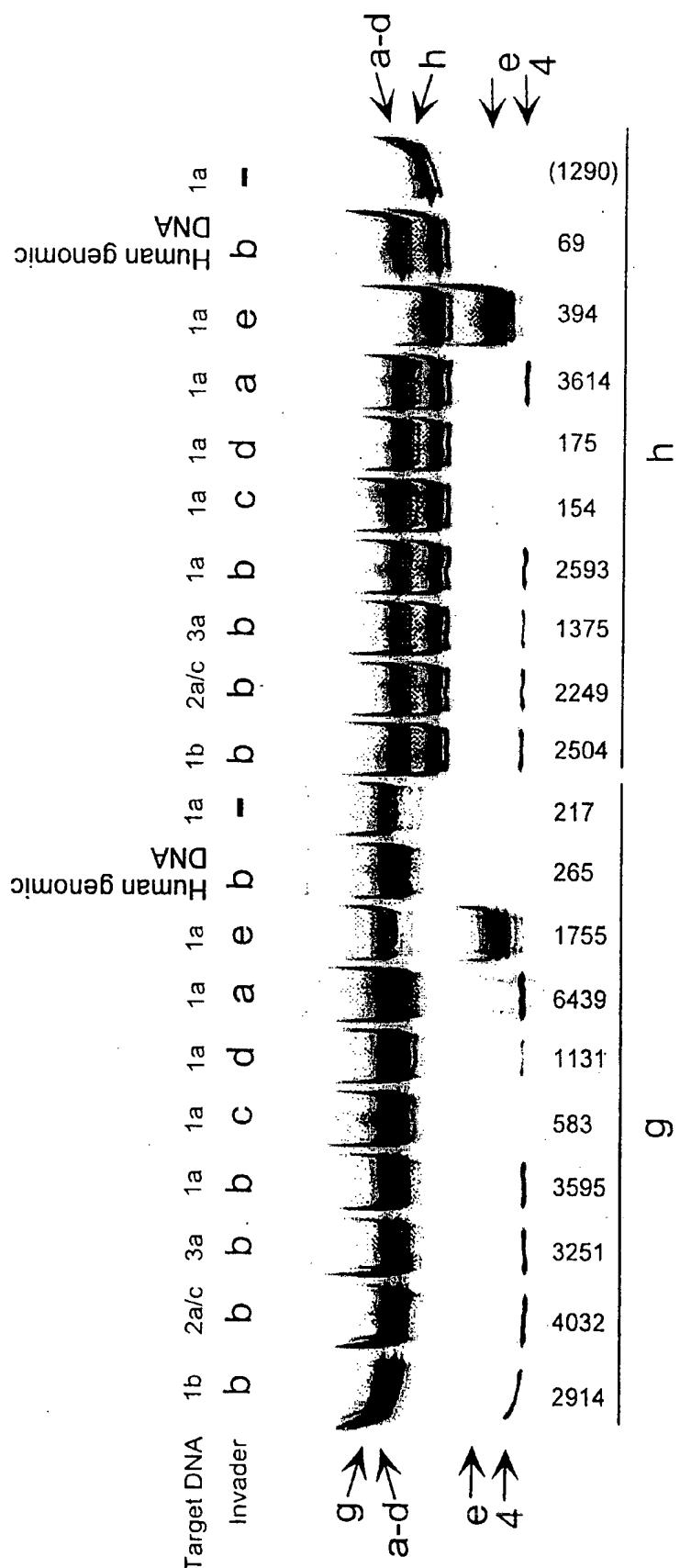
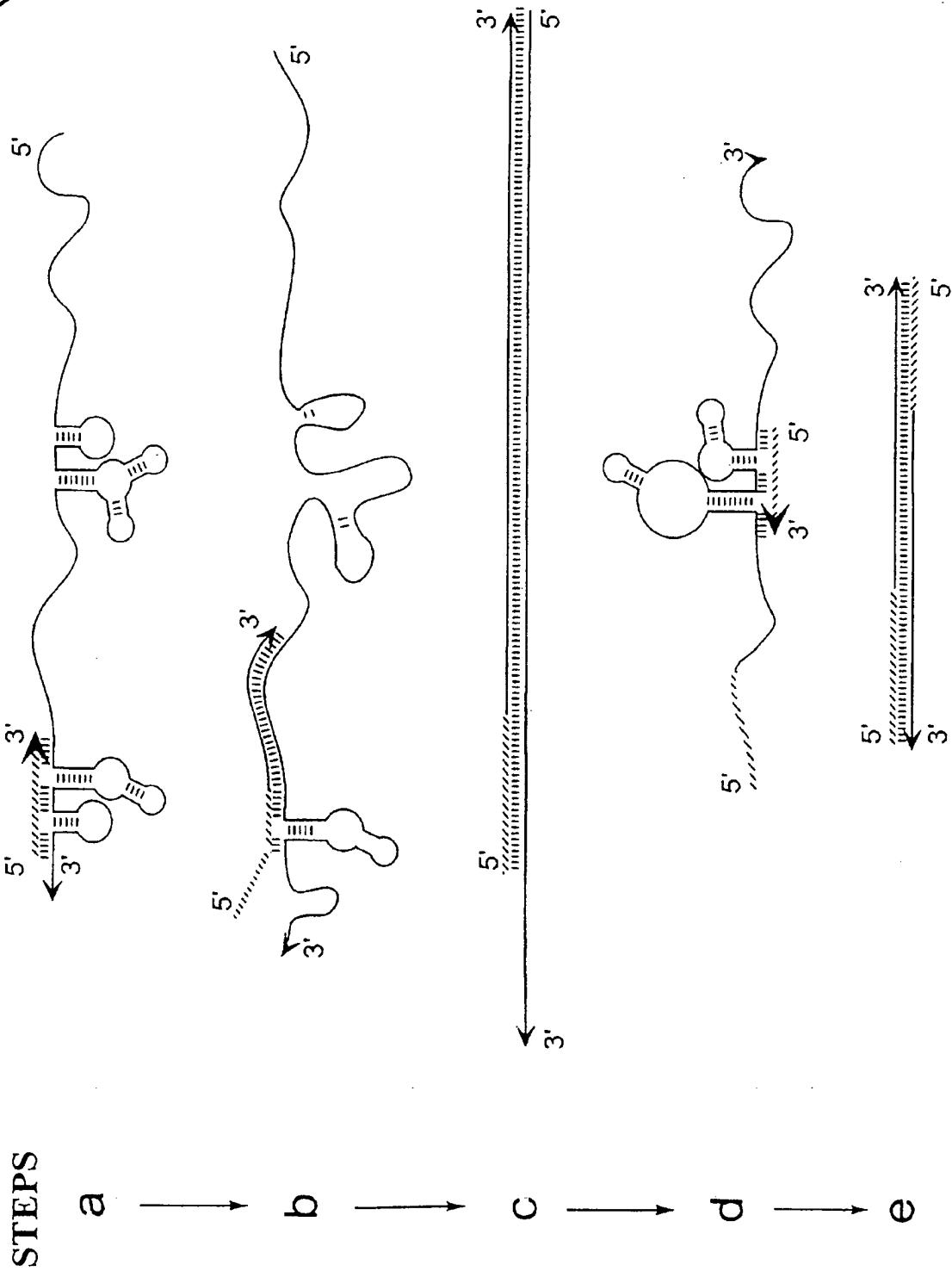




FIGURE 34

STEPS

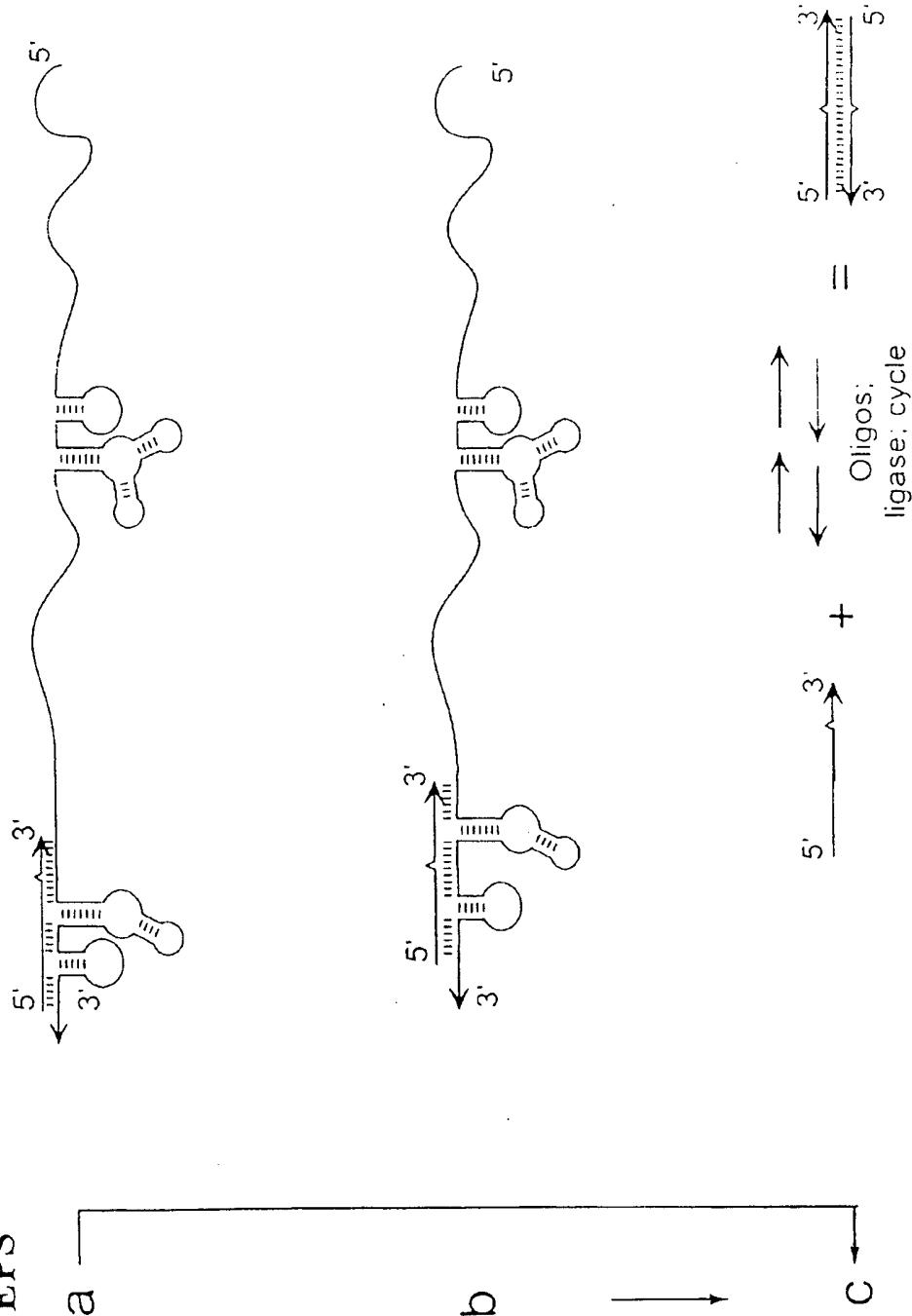




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FIGURE 35

STEPS





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FIGURE 36

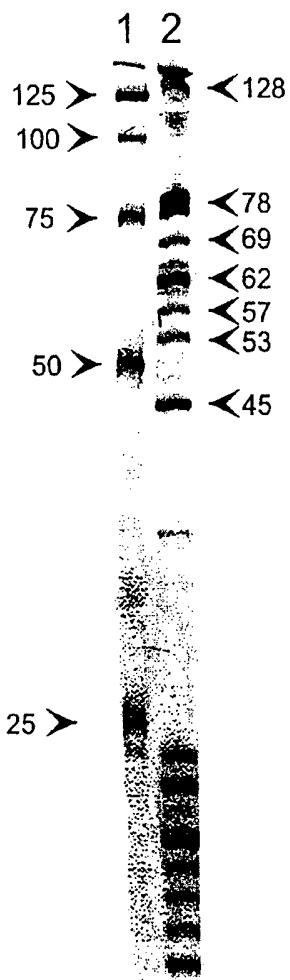
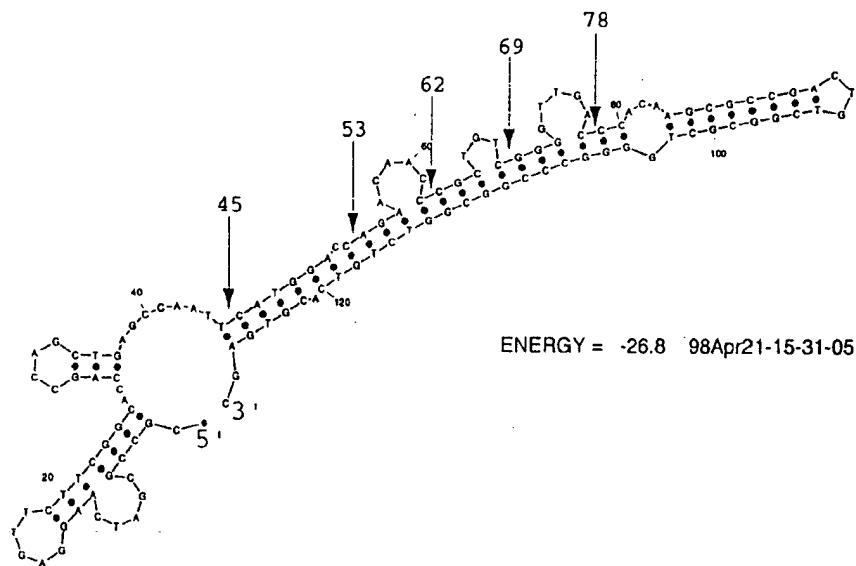
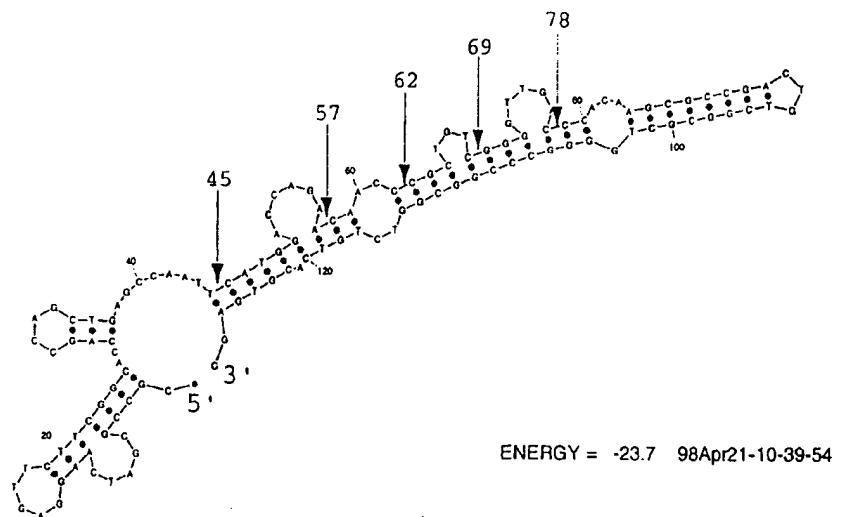


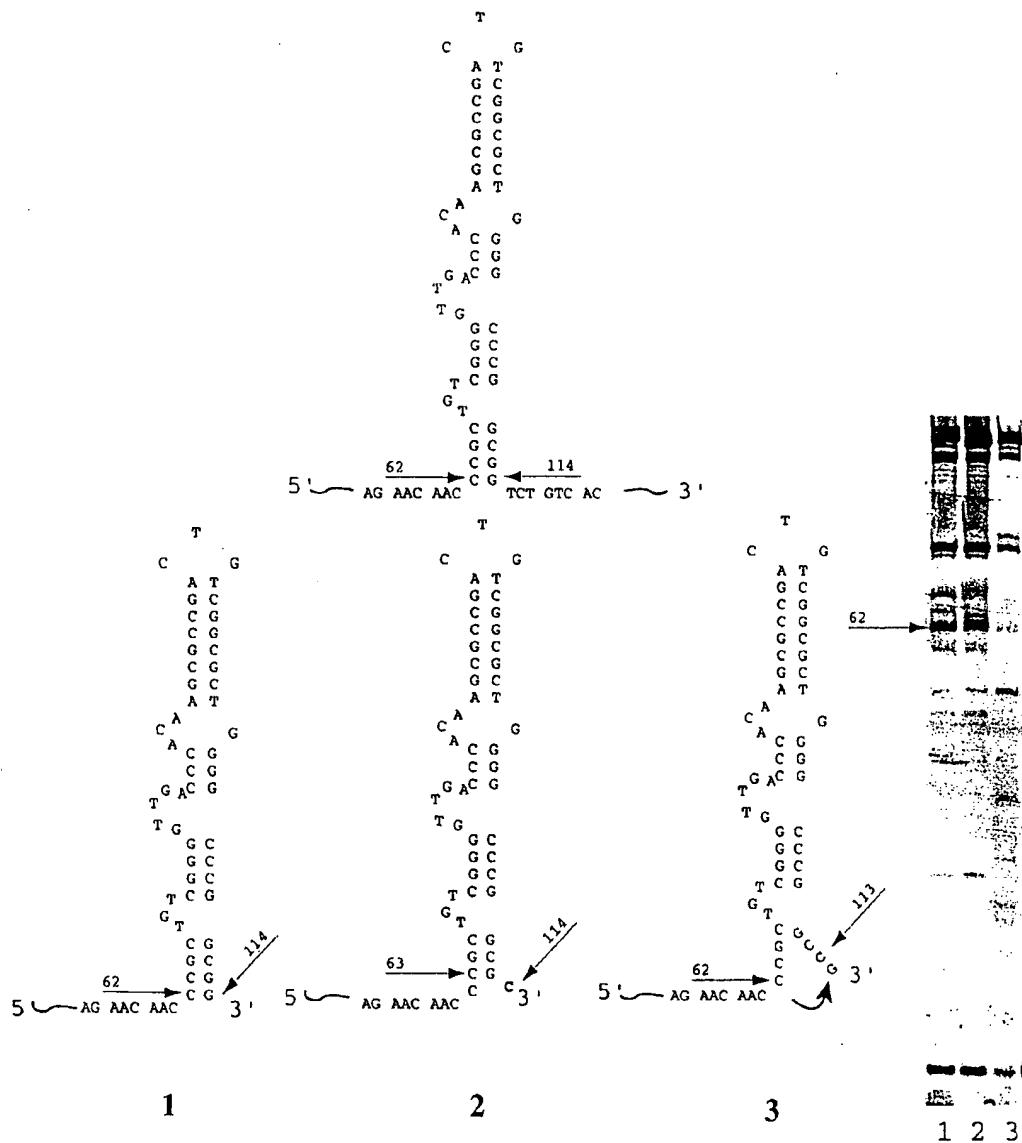


FIGURE 37A





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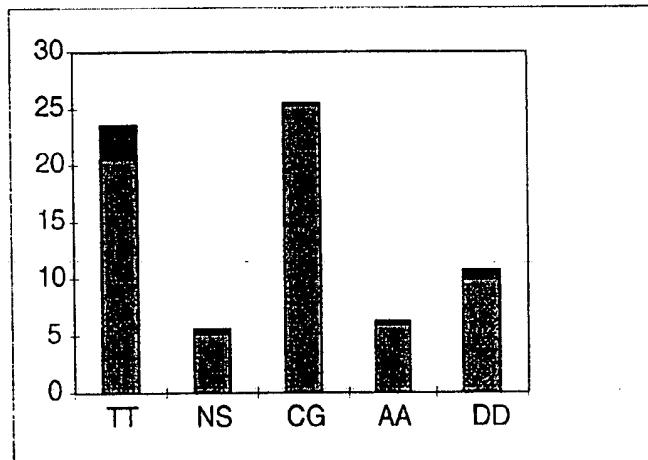
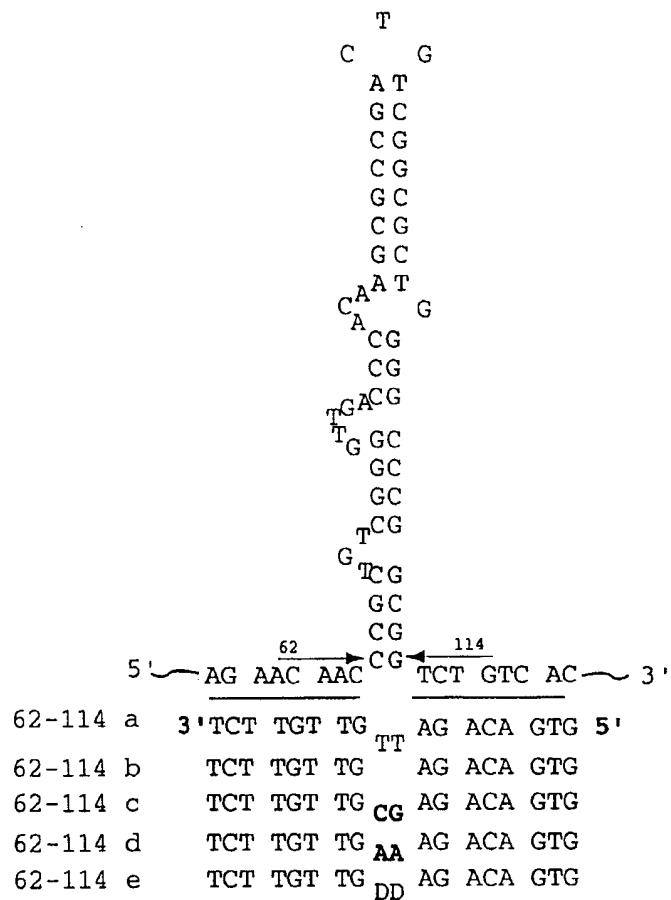




FIGURE 38A

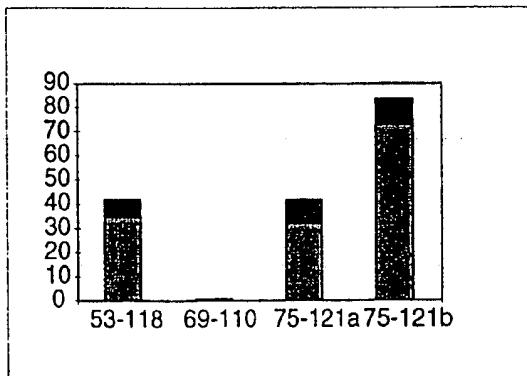
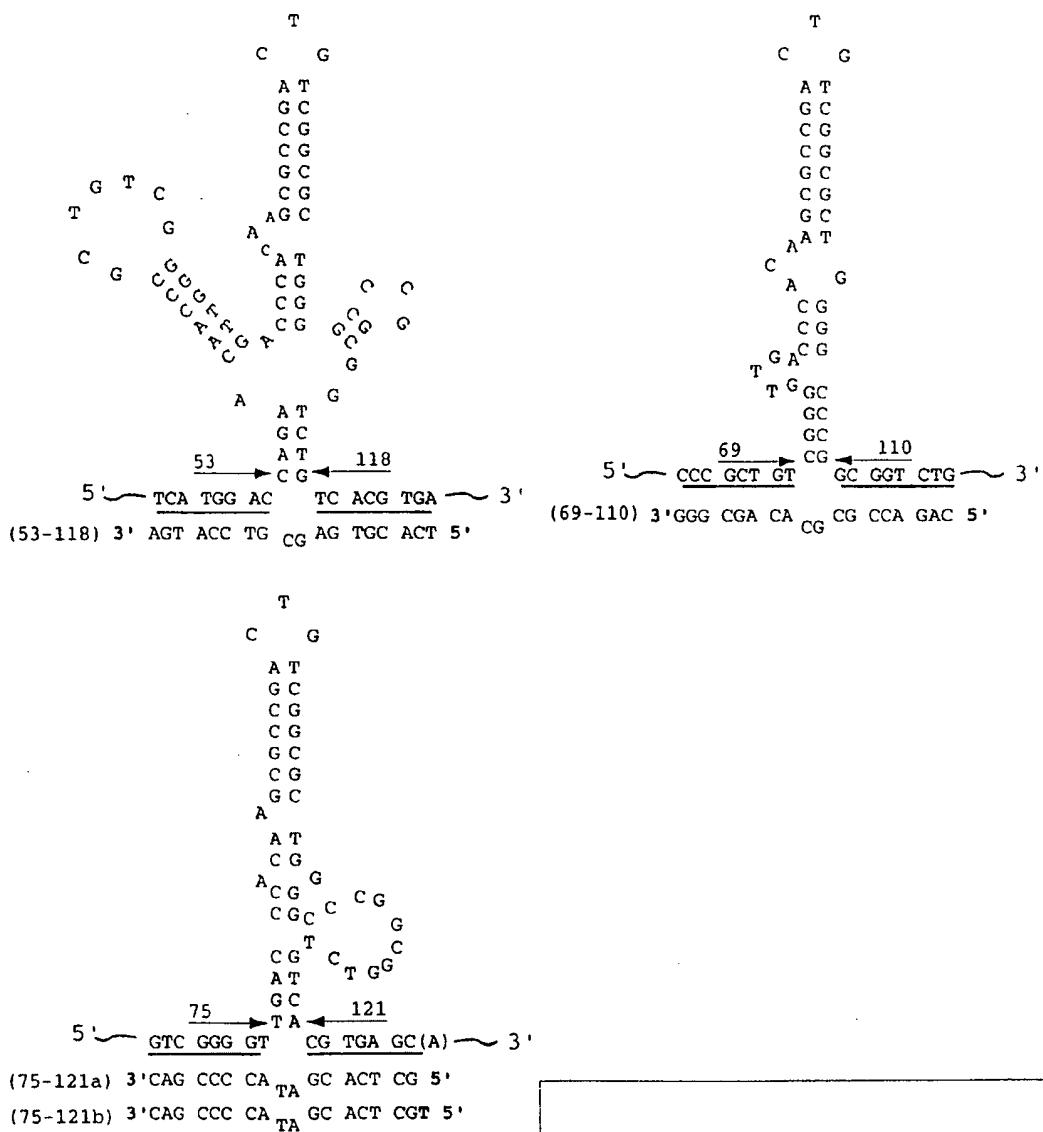
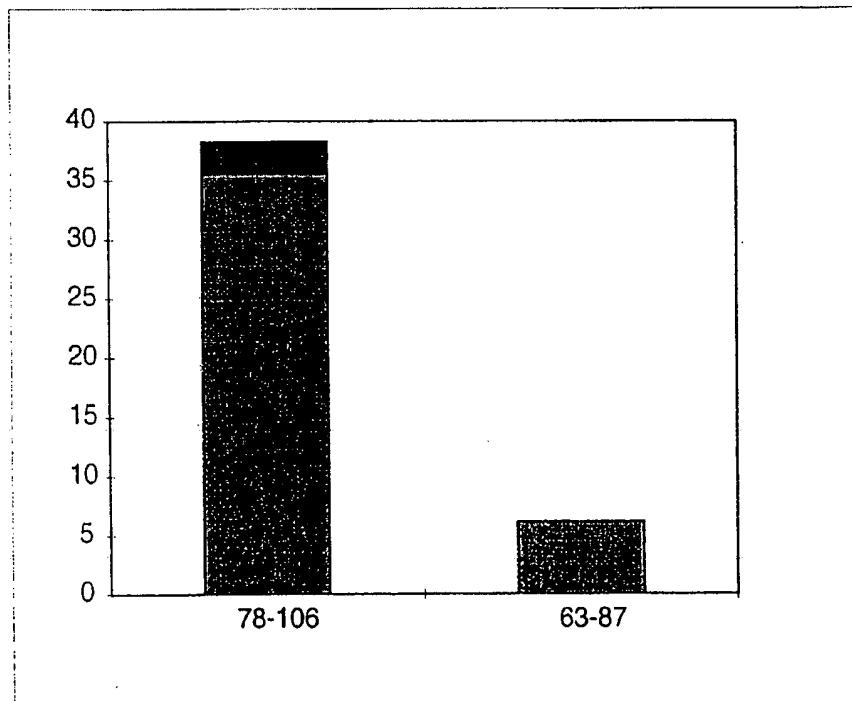
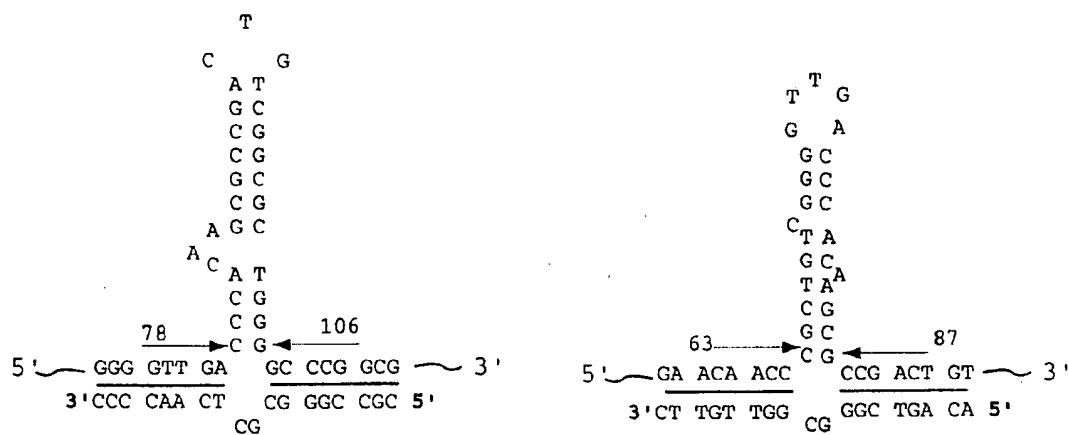




FIGURE 38B





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FIGURE 38C

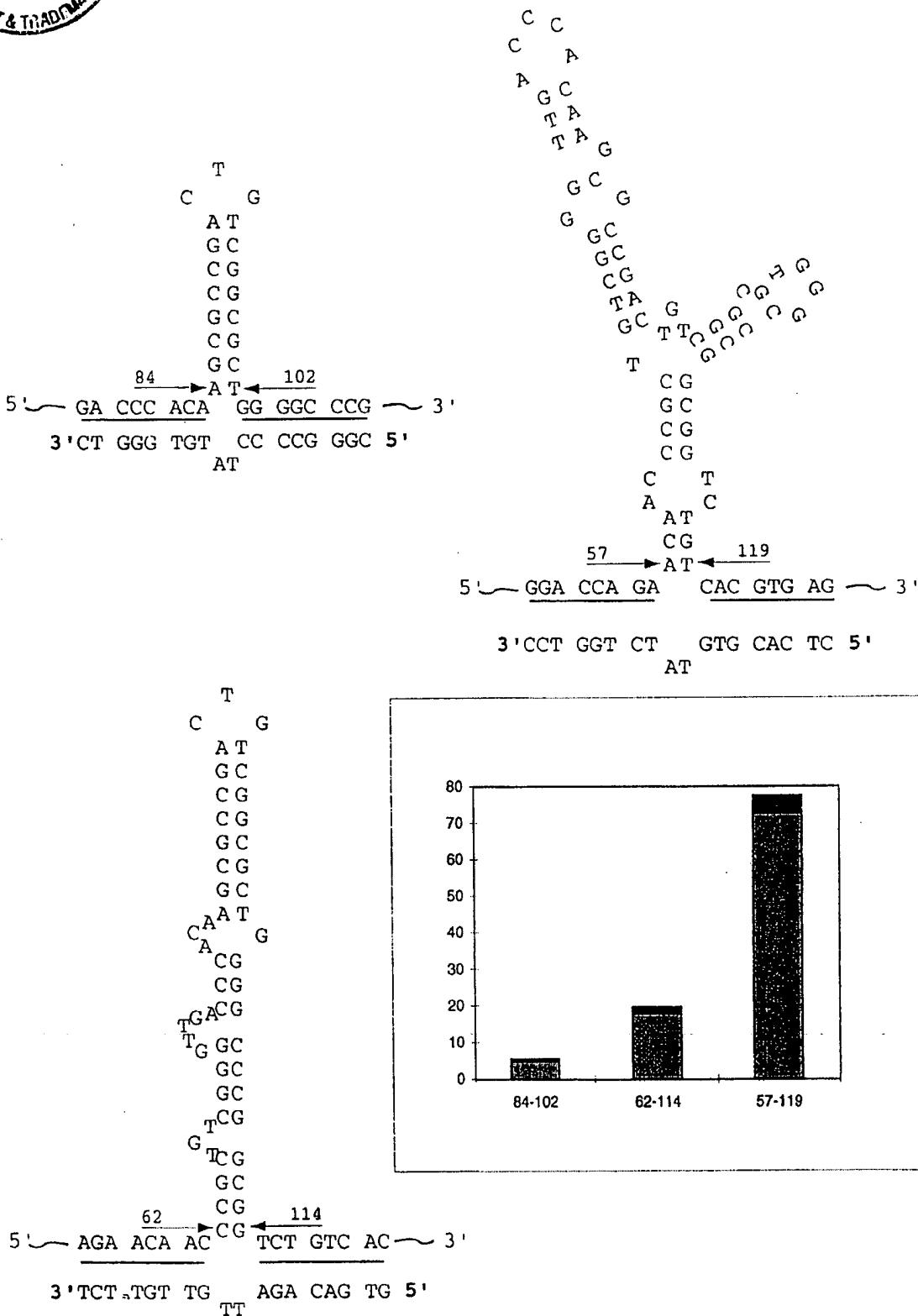




FIGURE 39

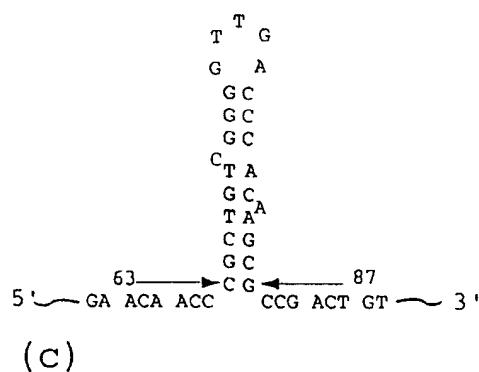
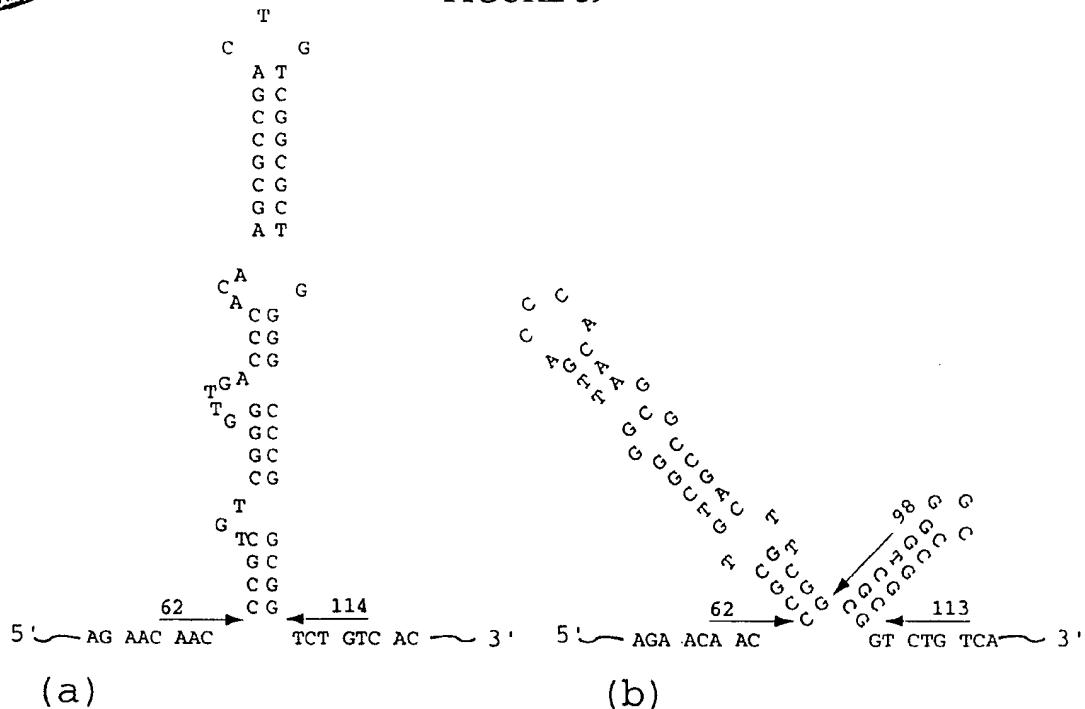
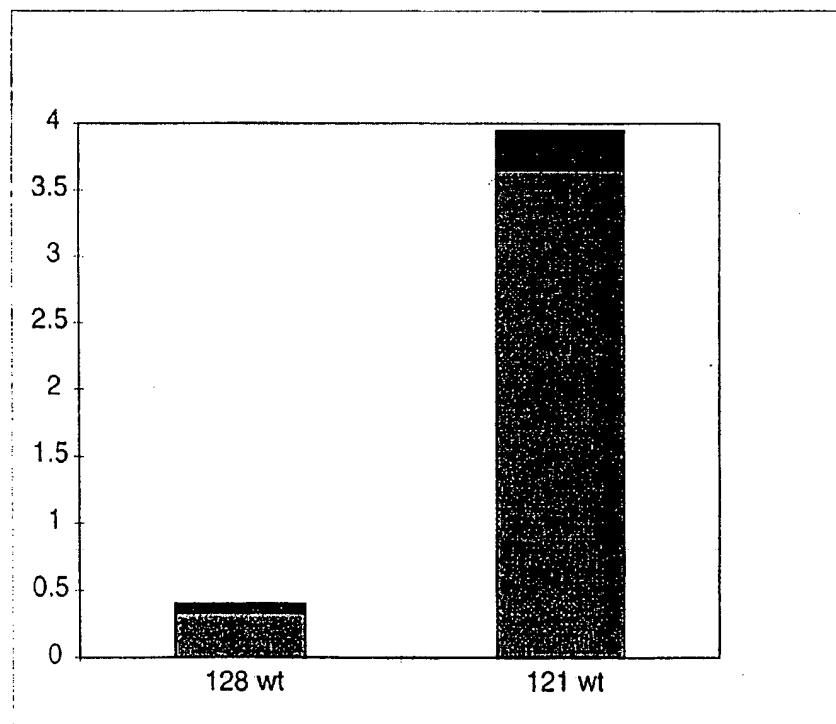
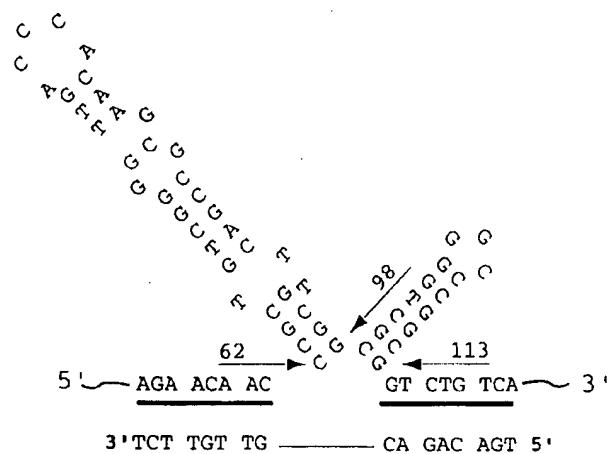




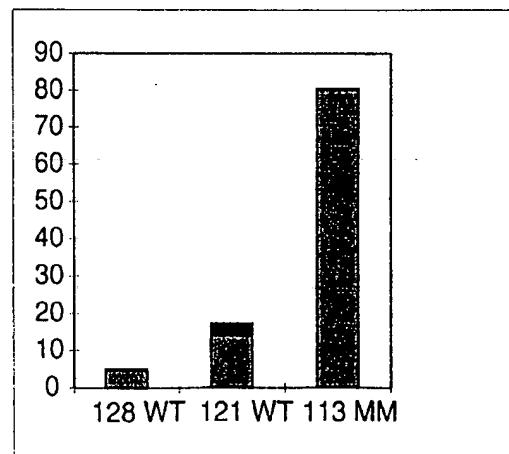
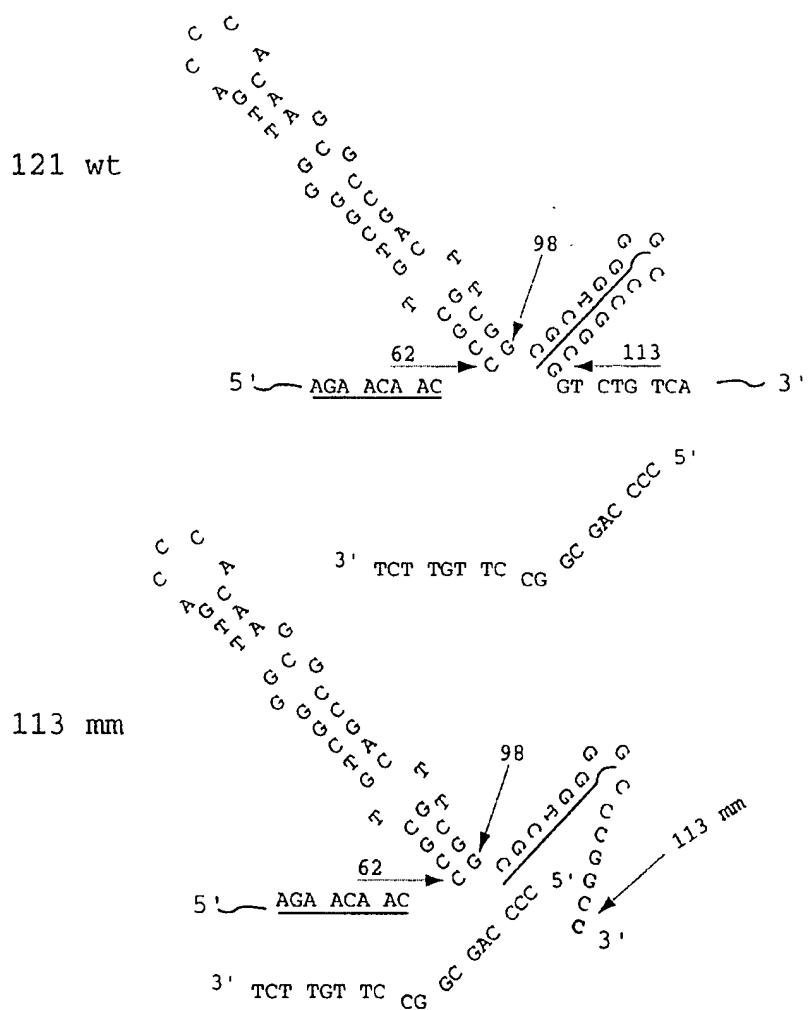
FIGURE 40





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FIGURE 41





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FIGURE 42

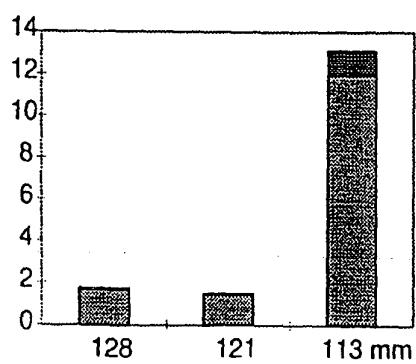
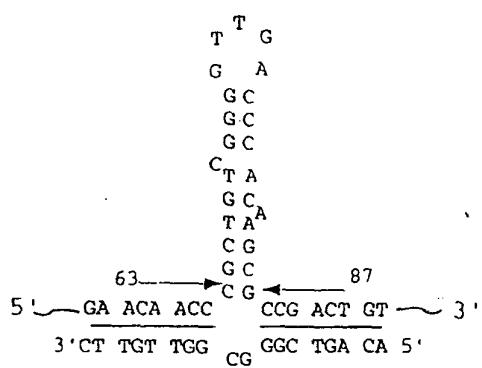




FIGURE 43A

HCV 1a

HCV 1a

5' - CAATCCGGTACTCACGGTCC GACCG AT  
 3' - GCCAAGG TTTG

161 → AT → CG ← GC ← AC ← AG

173 T G C C G T G T A T<sup>196</sup>



FIGURE 43B

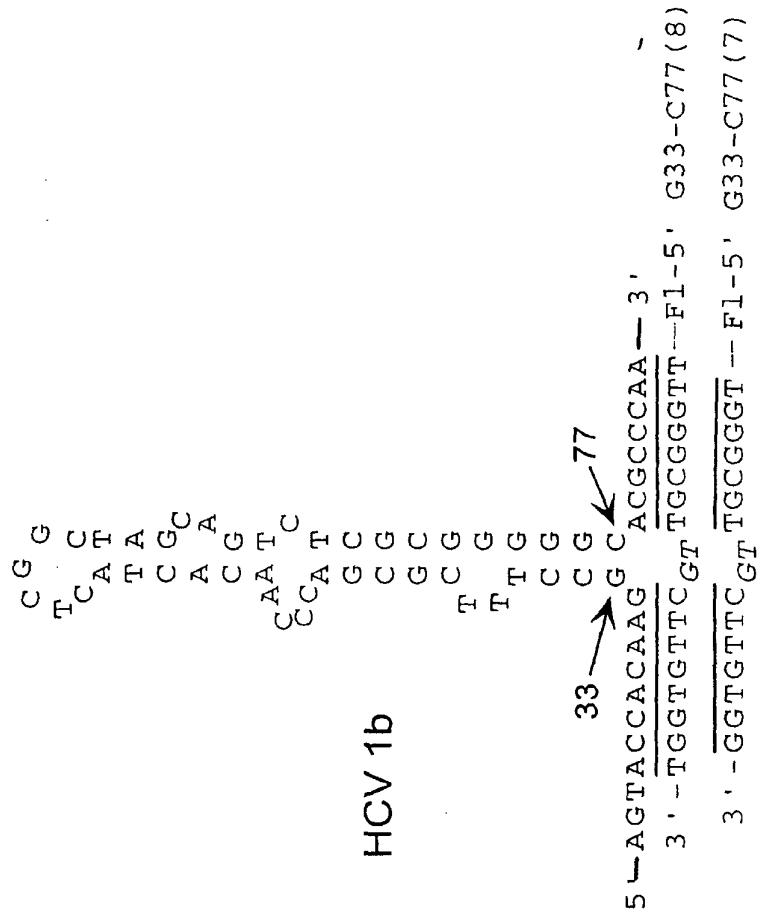
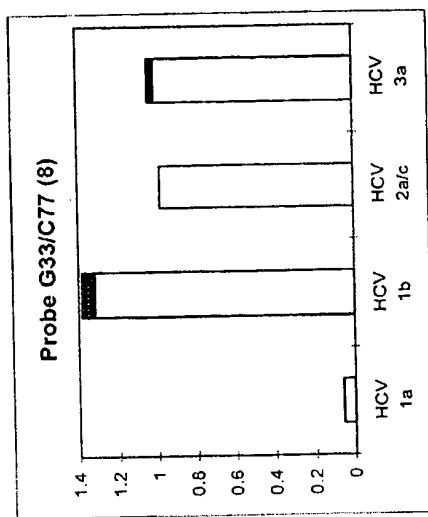




FIGURE 44A





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FIGURE 44B

